INTERVIEW: Fran Lebowitz, America's Funniest Woman

High Times

August '78

$1.75

ELECTRICITY
Life at 60 Cycles-Per-Second
by Glenn O' Brien

DOPE & ENERGY
by "R.," Dope Connoisseur

ATOMIC DISASTERS
One Every 17 Years?
by Harvey Wasserman

HIGH TIMES POWER BONUS
WHERE TO GET IT, HOW TO USE IT—

- Wind
- Solar
- Ocean
- Lightning
- Pyramids
- Muscles &
- The Ever-Popular Perpetual-Motion Machine

CENTERFOLD:
King Bong
World's Heaviest Hashpipe

Smoke-In Updates
STONED SUCCESS


FROM OUT OF THE WEST...
GROWERS CHOICE©
Marijuana Fertilizer
TURNS YOU ON TO THE "GROWING FORCE"
Dig this!
when you grow your own
SINSEMILLA
-POWERED HAIR - $2400
Jim Evans
mail to:
KING KOLO-HEAD GROWER
GROWER'S CHOICE
Box 548 Encinitas, Cal. 92024
flower capital of the world
WE HAVE THE NUTRITIONAL JUICE!!
Make your plants grow stronger, stonier electric-green growth in their youth to sweet-scented, resin-coated virgin Red hair Female Flower tops.
Grower's Choice Guarantees to grow indoor and outdoor healthier, larger, stonier plants or your money back and we mean that.
"We are the GROWING FORCE!"
We ship in covered wooden boxes.
to protect the innocent.
☐Grower's Choice Marijuana Sinsemilla Fertilizer-at $9.95 add $3.50 shipping & handling East of Miss. River, $2.50 West of Miss. River.
☐"Mota Warrior" T-Shirt $4.95 & $1. postage circle size-SMALL, MEDIUM or LARGE.
☐"Mota Warrior" Cosmic Marijuana Almanac a 3-month calendar outlining cosmic planting, fertilizing & watering dates in color. $3.50 ea. & $1. postage. Send cash, check or money order. California residents add 6% sales tax
Name Address
City State Zip
mht35
The Indian's T-shirt is for sale—we silk-screened the robot's image on a high-quality California T-shirt it's good enough for weird Warhol Freaks to wear and if that isn't commerical enough we've made a "Cosmic Marijuana Almanac" From the above robot Ad outlining planting, fertilizing, watering and pollination dates in color. Saving grace is that we cared—it looks and feels right.

High Times

Aug. '78 No. 36 THE MAGAZINE OF HIGH SOCIETY



Interview: Fran Lebowitz
Glenn O'Brien 40

The Nuclear Plot
Harvey Wasserman 50



Who Owns the Sun?
Dick Bell 56



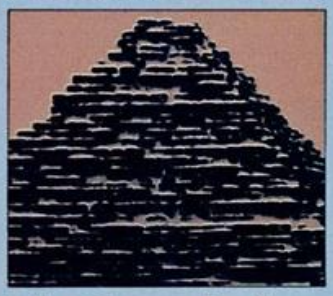
Natural Living: Solar Do-It-Yourself 61

Centerfold: King Bong 65

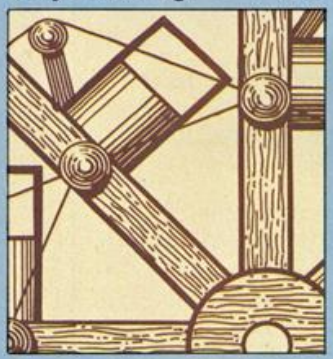
Electricity
Glenn O'Brien 68



Technology: Alternative Energy
Dave Noland 73



The Secret of Pyramid Power
Gary Stimeling 79



Amazing Perpetual-Motion Machine
Colin Warbeck 85

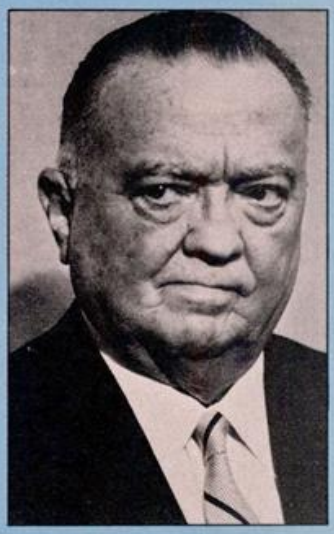
Comix 91

HIGHWITNESS NEWS 27



Daring 'Lombo Breakout Frees Pot Heroes 27
Smoke-In Update 28
Nebraska Becomes 11th Decrim State 29
High Crimes 30
Cocaine Confidential 31
Reefer Reform 32
Georgia Outlaws Dope Paraphernalia 33

THE PLANET 95



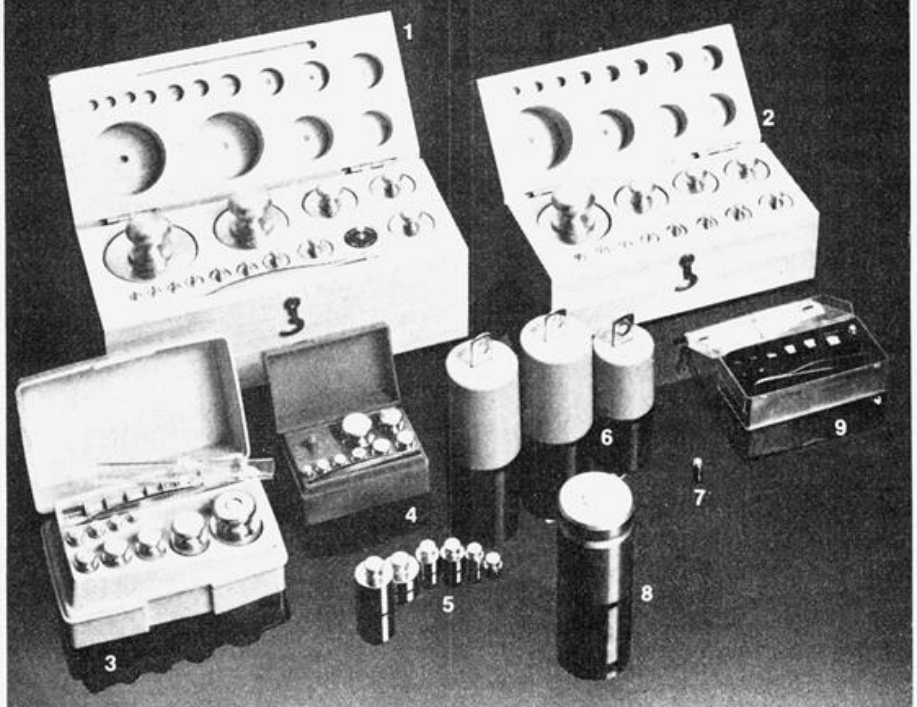
FBI's Secret War on Mexico 95
Colombian Paper Blasts *High Times* 99
Running Anisette in South France 100
CIA Plutonium Poisons the Ganges 103
African Witch Doctors Given M.D. Status 106

Cover by Josef Muench

DEPARTMENTS

Opinion 6
Letters 8
Adviser 10
Stash 12
Sports 15
Media 17
High Society 21
Dope 23
Trans-High Market Quotations 38
Culture Hero: Vincent Titus 108
Law 121
Records 123
Books 126
Flash 129
Sideshow 130

Correct Count



1. WOOD 1000—$69.95/Superior quality brass weights from 10 mg to 1000 gms. Equipped with forceps. Precision crafted custom wood box.

2. WOOD 5000—$54.95/Superior quality brass weights from 1 gm to 500 gms. Precision crafted custom wood box.

3. OHAUS 211-10—$24.95/Weights from 10 mg to 100 gms.

4. OHAUS 241—$11.95/Weights from 10 mg to 50 gms.

5. SET OF 6 BRASS WEIGHTS—$5.95/Weights from 2 gms to 50 gms.

6. OHAUS 707—$15.95/Increases capacity of triple beams to 2610 gms.

7. ONE GRAM WEIGHT—$1.00.

8. ONE POUND WEIGHT—$8.95/Superior quality stainless steel.

9. MILLIGRAM SET—$5.95/Weights from 10 mg to 1 gm. Used to test accuracy of scales.

Correct Count proudly announces our expansion to the West Coast. Now shipping to you from both sides of the country for faster and more efficient service.

All orders & correspondence: Correct Count Co., Inc. 607 State St., Santa Barbara, Ca. 93101 Tel. 805-963-3830

Complete 16 Page Color Scale Catalog available—Please send $2.00.

Please send money order for fast shipment. Personal checks allow four weeks delivery. Master Charge and Visa/Bank Americard (send card number and expiration date).

We ship C.O.D. CASH — $1.00 Extra.

Dealer and Distributor Inquiries Invited

High Times

THE MAGAZINE OF HIGH SOCIETY

DESIGN DIRECTOR
T. Courtney Brown

MANAGING EDITOR
Shelley Levitt

FEATURE EDITOR
Ed Dwyer

ASSOCIATE EDITORS
Victor Bockris, T. Courtney Brown, Michael Chance
A. Craig Copetas, Dean Latimer, Robert Lemmo
Gary Stimeling, Harry Wasserman

ASSISTANT EDITOR
Carol Ryder

COPY EDITORS
Allen J. Sheinman, Greg Wustefeld

CONTRIBUTING EDITORS
Richard Ashley, Dana Beal, Chip Berlet
Bruce Eisner, Albert Goldman, Michael Horowitz
Stuart J. Levine, Glenn O'Brien, Bruce Ratcliffe
Ron Rosenbaum, Deanne Stillman, John Wilcock

ART
Neal Kandel, Managing Art Director
Pete Lippincott, Special Projects
David Clayton, Newsprint
Randy Brozen, Art Assistant

PRODUCTION
Robert Sacks, Production Manager
Jim DeSalvo, Assistant Production Manager
Kathy Ladouceur, Assistant
Ed Cobb, Assistant

NATIONAL CIRCULATION DIRECTOR
Stanley Place

PUBLIC INFORMATION DIRECTOR
Michael Luckman
Victoria Horn, Assistant

TREASURER
Jack Braunstein

CONTROLLER
Neil Sontag

STAFF
Peggy Bennett, Diane Brodie, Jennifer Charles
Lynne Cummings, Bonnie Gordon, Melody Johnson
Missy Kandel, Penny C. Layne, Marilyn Mendelsohn
Stephanie Moore, Rimone Newman, Richie Pagan
Pablo Rosa

EAST COAST ADVERTISING SALES
Liz Trombetta, Director
Susan Scharf
(212) 481-0120

WEST COAST ADVERTISING SALES
Steve Becker, Manager
Susan Coffey
8833 West Sunset Blvd., Suite 305
West Hollywood, Ca. 90069
(213) 659-8811

PRESIDENT, THC
Al Bernstein

EDITORIAL CONSULTANT
Robert Singer

August 1978 • No. 36 • *High Times* is published monthly by Trans-High Corporation • Mail subscriptions (payable in U.S. funds) to Box 965, Farmingdale, N.Y. 11735 • Subscriptions in the United States: 12 issues for $16, 24 issues for $29 • In Canada: 12 issues for $18, 24 issues for $33 • In South America, West Indies and Caribbean: 12 issues for $30 • In Europe: 12 issues for $37 • In Africa, Asia and Middle East: 12 issues for $45 • Send all mail to *High Times*, Box 386 Cooper Station, New York, N.Y. 10003 • Offices at 116 East 27th St., New York, N.Y. 10016 (no mail to this address) • Second-class postage paid at New York, N.Y., and at additional mailing offices • Manuscripts must be accompanied by a self-addressed stamped envelope • All contributions will be carefully considered, but the publisher and editors assume no responsibility for loss or injury to unsolicited material • Member of the Audit Bureau of Circulations.

Copyright © 1978 by Trans-High Corporation. Nothing in this publication may be reproduced in any manner, either in whole or in part, without specific written permission of the publisher. All rights reserved. "*High Times*" is a registered trademark. Postmaster: Please send form 3579 to *High Times*, P.O. Box 965, Farmingdale, N.Y. 11735.

***High Times* is free to prison libraries.**

COCAINE IN WOOD



You've got the problem...

Until now there hasn't been a stash-can or vial on the market designed specifically to enhance and prolong the quality of your buy. Glass, plastic, and metal keepers react rapidly to temperature changes trapping condensation inside. To you, this means toots down the drain because heat, light, and most of all moisture, all reduce coke's effectiveness.

And we have the solution.

An air tight, wooden drying chamber that creates and maintains a natural climate for ready-to-use cocaine. Unlike plastic, metal and glass, wood is able to extract moisture from within the chamber and yet react slowly to temperature changes outside, keeping your coke powdery dry. This buffering action not only prolongs the life of your coke, it improves coke that contained moisture when you brought it home.

Extensive research has shown us that not just any wood will do. Only solid Honduras Mahogany possesses the superior absorptive qualities required.

Beyond its practical application, this top grade Mahogany chamber is a thing of beauty. Each is individually hand crafted and then hand polished with natural oils to give you a rich looking luxurious "keepsake." In addition, it is small enough to be discreetly carried in your purse or pocket.

Now you can travel anywhere and have ready-to-use cocaine at your fingertips. Order now and prevent further loss of your precious purchases!

We do not advocate the use of cocaine...only its care!



Kit Includes:
Chamber,
Pewter Spoon,
Carrying Case.



MONEY BACK GUARANTEE

If you are not 100% satisfied with the quality and performance of this product you may return it in its original condition within 10 days for a full refund.

ALTO – P.O. Box 6903039
Miami, Fla. 33169

Please send me _____ ALTO chamber kits @ $35.00 ea. plus $1.00 ea. for postage and handling. Enclosed is a check or money order for the total amount due of $_____.

Name _____

Address _____

City/State/Zip _____

NO C.O.D.'s – Florida residents add 4% sales tax.

Smoking Section™

Welcome to the e-z wider® Smoking Section. This is the first of a series in which we plan to talk about rolling papers, music, smoking, hang gliding, surfing, old movies, people, racing cars, pipes, and other stuff.

We started e-z wider 6 years ago when we got tired of sticking two pieces of cigarette paper together.

"Why doesn't somebody make the paper twice as wide?"

"Why don't we?"

We told nine major paper companies we wanted to put out a double-width paper. They said, "No," "Can't be done," "Forget it," "It isn't done that way," and "You can't possibly be serious."

The tenth company started to produce e-z wider for us. The first double-width rolling paper. We thought we should make it the highest quality paper available. It is, and we hope you enjoy it.

Do you have dreams of flying? So does Tom Peghiny. He also flies. Tom designed and flew his first hang glider at thirteen. Built it out of bamboo poles and an old parachute.

He has won 26 major hang gliding contests, including the 1977 U.S. Masters. Tom is sponsored by e-z wider and is captain of the e-z wider flying team.

The shiny stripe on e-z wider papers isn't glue. It's gum arabic, a substance pure and natural, taken from gum trees. Lick it lightly. It'll stick better, and your tongue won't get all tired out.

Write us about any of our products; you happen to be the reason we make them. And we listen. Or send a funny experience you've had with smoke. If we print your story, you get a year's supply of the world's highest quality rolling paper. Specify e-z wider double width, or the new 1½-size or 1¼-size e-z wider.

Meanwhile, have a good time, and take it easy!

e-z wider®

SMOKING SECTION
P.O. Box 1785 Grand Central Station
New York, NY 10017

© 1978 robert burton associates, ltd.



Power for the People!

The handwriting is on the container wall. Atomic power plants give cancer to nearby residents and pose a constant threat of thermonuclear meltdown. Their undisposable excrement will glow on our descendants for a thousand centuries. Still, President Carter wants 400 by the year 2000, and, despite growing protests by us uppity rubes, there's no doubt the industrial-police complex could push them down our throats—were it not for a far more serious problem: they are losing money. Thus the titans of commerce are forced to consider solar energy. Their problem is, how do you sell something that falls free on rich and poor alike? Ah, good ole Yankee ingenuity.

As Machiavelli explained long ago, a principality "can be more easily ruled through its own citizens than in any other way." Corporate solar market strategy will rely on the dependency of workers on jobs that exhaust them while taxes and inflation conspire to keep them in the hole they're in. It will build on generations of advertising pablum that has convinced most people they can do nothing for themselves but buy. The idea is to convince you you're building a better world by purchasing a solar collector from General Electric.

This is why our government gives large corporations money they don't need to test a technology that already works while denying aid to homeowners who want to go solar. This is why Carter's energy plan proposes a maximum $2,000 tax credit for installing an "approved" system, while approval has been systematically delayed until the multinationals can get their monopoly together. This is why Washington's most influential "solar lobby," the Solar Energy Industries Association, is headed by Sherman Butz, whose Olin Brass Company makes nearly all the pipe used in nuke plants.

One of the trickiest antisolar schemes is the Demand Energy Usage system set up in Colorado. Under this plan, solar-powered households are charged a prohibitively high rate for the backup electrical power they may need after long cloudy spells.

The ultimate plan is a national energy grid with huge "solar factories" in sunny climes feeding power elsewhere as needed—theoretically a fine idea but also the perfect way to let utilities charge what they please for something inherently free. Let's save that one for the millennium.

In the imperfect meantime, reflect on the prospect the energy barons find so frightening—consider what you can do for yourself. Solar energy is largely a do-it-yourself technology, and the plans are right there in your library or bookstore. With a little work anyone can produce most of the energy needed for hot water and home heating. If you control your own living space, some extra determination and the use of other power sources—like wind or water—can make you a utility company unto yourself, totally self-sufficient right down to producing methane or electricity to run your car and growing your own food in a solar-efficient greenhouse.

Naturally, urbanites owned by landlords have a preliminary problem to solve first, but none of this takes into account what people can do when they pool their resources as friend groups or co-ops. Urban homesteaders like the ones who made a solar haven out of a crumbling tenement on New York's Lower East Side have proved that independence is possible even in the cities.

Think about it for a minute. Total self-sufficiency means total freedom—from energy companies, agribiz and hack jobs to pay the rent. Some utopian fantasy, huh? What the hell. Power belongs to those who take it, and you might as well give it a shot for a few years before you die of pollution. If you succeed, just think what you'll be missing—you won't have Exxon to kick around anymore.

Gary Stimeling
Associate Editor

IT WILL STUN YOU

Fazor T.M

BEAM ME ☐ **FAZORS**T.M **at $5.99 ea.**



THE **POWER HITTER** PEOPLE

OAT WILLIE'S DEPT. STORE INC.
6307 BURLESON ROAD
AUSTIN, TEXAS 78744

Check or Money Order only. Add 50c per item For Postage and Handling (Texas Residence add 5% Sales Tax)

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

☐ FULL COLOR **FAZOR** POSTER $1.50 EACH PLUS POSTAGE AND HANDLING



© OAT WILLIES
AUSTIN, TEXAS
1978



Ketamine and Back

Richard Ashley's description of ketamine [*High Times*, "Avant Garde Highs," March '78] rang true. I received the drug four times in the course of a sex-change operation. The first two times were in '76, when I had a nose job and silicone gel slabs sewn into my chest. I was fully conscious, there was a lot of pain, and I talked to the doctor while he hacked away; but I was completely paralyzed—all I could see was a brilliant red.

The third time I met ketamine was when I had the sex-change operation itself in April '77. Not much to tell; they also gassed me and I went out like a light. The fourth trip was last August when I underwent "revisional vagino-plasty" surgery to reopen my surgically created vagina, which had closed after the previous operation. This time my mind left my body and apparently went to what some describe as the "second state."

I felt I was in a huge, well-lit room, in front of a massive throne draped in lush red velvet. I saw nothing else but felt the presence of higher intelligence tapping my mind of every experience and impression I had gathered. I begged to be released, to return to my body. It was terrifying. Finally I blacked out and slowly came to in the recovery room. That's my ketamine experience.

—A.D., Berkeley, Ca.

Hide and Go Reap

When the sunflowers and corn plants die, and you've got a conspicuous garden of green in the middle, do what I had to do. After a full day's sun, step gently on the base of the stalks and lay them down flat. Throw a shovelful of dirt on the exposed roots and you're all set. Every one of my plants lived, and the cars on the highway never stopped for a free sample(s).

—A.C., Denver, Colo.

Miscue

I read in the March "High Society" that there was a pool play-off between Minnesota Fats and Willie Mosconi and that Fats won. The very day I read the article, I saw the match on "Wide World of Sports." To my surprise (I freaked out) Willie Mosconi took the whole play-off. *Fats lost!* So, what's with the item in your mag? *—Brian Johnson, Kansas City, Mo. Nobody's perfect, Brian. Your TV made a mistake.*—Ed.

Bomb the Buggers

Robert Wilkinson's "Don't Bug Me" [*High Times*, April '78] was an ear-opening introduction to electronic warfare. It gave me some ideas for countersurveillance on the narcs who nabbed me last winter for importing foreign medicines. (And I didn't even use the phone. They set up my receiver as a room mike just as Wilkinson described.) What I want to know is this—is there any way to rig a phone so it explodes in response to a Captain Crunch whistle when the intended target answers? *—Stan Rifken, Clinton, Iowa*

Lithium Warning

In the Tony Orlando item in "High Society" [*High Times*, April '78] lithium was described as "an inexpensive little pill that can wash away the biochemical sources of depression in weeks." That statement is true for certain types of depression—usually those in which the depression is but one component of manic-depressive illness. However, that determination should be made only by a physician.

In case any readers can get their hands on lithium carbonate, I would also like to strongly emphasize the fact that lithium is a highly toxic drug. The difference between a therapeutic blood level and a toxic one is much smaller than for most drugs. In fact, when a physician prescribes the drug, lithium blood levels should be obtained frequently at first and then at less frequent levels after a month or two of treatment. Finally, there is no high associated with the use of lithium, so it's not worth much for recreational purposes. *—Dugald D. Chisholm, M.D., Atascadero, Ca.*

A Salty Dog Barks

While strolling up from the South Street Seaport this morning with a Saint Paddy's Day hangover that would stop a fuckin' yak in his trak, I spied your April issue. Leering at it with eyes like piss holes in the snow, I mistook it for a bloody *yachting* magazine!

"The Last Run" was a good tale, only I don't understand the bit about getting away from the Moroccan coast. If the wind was east, then the boat, presumably heading *west*, would have been running free, that is, heading directly downwind, and she would have been bone-dry, unless it rained.

—Tristan Jones, New York, N.Y.

Just Ducky

It's about time you gave some recognition to Howard the Duck [*High Times*, "Media," April '78]. Now, if you could only get artist Steve Gerber to team up with Gilbert Shelton—we'd have a Furry Freak Duck!

—Jacqueline Maggio, Butte, Mont.

Thanks to Paraquat

Back when the paraquat scare was at its highest, I found myself in a very lucky spot. You see, I usually deal a lot of Mexican from a connection in Arizona. Well, when NORML and all those other lames were telling people to stop smoking Mexican weed, this guy started to panic. He dropped his price on some very good, gold-colored dope from Guerrero.

The color put him off because he hadn't seen much Mexican gold in years and suspected it was paraquat yellow. What's more, his customers refused to buy any Mexican until the green light came from the government (of all people!). I made a fast trip south after he told me about his problem. The stuff was dynamite! I picked it up for about half of the usual tariff and sold it just last week to some very satisfied customers.

—Name withheld, Salt Lake City, Utah

Turn In, Tune Out

In your editorial introduction to Timothy Leary's "Deal for Real" [*High Times*, April '78] you state that Timothy "has turned stupid" since his days as "High Priest of Acid." This gratuitous insult is way off base.

Leary's *Neuropolitics* and *Exo-Psychology*, both published in 1977, contain profound analyses of, and witty commentaries on, our era. The latter, in particular, integrates what our species has learned about itself in the last 20 years into a brilliant hypothesis as to the past and future evolution of the human psyche and nervous system. It demonstrates that Timothy, far from being stupid, remains one of the planet's premier psychologists.

—Jeremiah Stock, Malibu, Ca.

The man may still know how to turn a theory, but you overlook the fact that Leary ratted on friends—who helped him escape from prison in 1970—in exchange for early release. And for that, the word stupid *is more than gratuitous—it's downright kind.*—Ed.

Correction

The March '78 "Flash" gave the wrong address for the Idea Contempo company, makers of the Wishspoon (under the heading "Make a Wish"). The correct address is P.O. Box 81, El Segundo, California 90045.

DON'T LIGHT YOUR STASH UNTIL YOU'RE READY TO SMOKE IT.

Light will ruin your herb . . . the EasyKeeper ounce bag keeps it out.

The worst possible thing that you can do to your stash is store it in a container that lets the light shine in. 'Cause light will destroy the strength of even the most powerful of fine leafed herbs. The most effective measure you can take to prevent your stash from breaking down is to keep it out of the light and in an air tight container. Our New **EasyKeeper** 1 oz. black storage bag is research designed to do just that. **EasyKeeper bags** are completely light proof and virtually air tight.

The results of a recent series of laboratory tests conducted by the **University of London's School of Pharmacy conclusively proved that even minimal amounts of light can substantially reduce the desired effects of certain plant resins.** In these experiments there was an overwhelming loss of potency in herb that was exposed to light, as opposed to herb that was kept in the dark.

The newly developed **EasyKeeper** storage bag has a quick locking top that not only keeps the light from seeping in, it prevents the freshness of your weed from getting out. And the importance of freshness should not be overlooked.

Light is not the only element that's injurious to your cache. High temperatures and exposure to air can also damage the high and mighty powers that come naturally with your favorite herb. The **EasyKeeper** bag keeps your leaves fresh because its quick locking lip and heavy gauge polyethelyne construction permits refrigeration to prevent humidity and moisture from draining the character of your buds. **EasyKeeper.** With the cost of getting off so high can you really afford anything less?



If **EasyKeeper** bags aren't available at your head shop they will be soon. In the meantime we would like to send you a Twin Pac that contains two **EasyKeeper** bags. Dealer inquiries are invited.



The **EasyKeeper** Twin Pac contains two 1 oz. bags. $1.00 per Twin Pac, plus $.50 postage and handling. (For 4 or more Twin Pacs, postage and handling are prepaid.)

Please rush me____ Twin Pacs. Enclosed find check or money order for $____ plus $.50 postage and handling fee. Ga. residents add 4% sales tax.

I certify that I am 21 years old. Call toll free 1-800-241-4620/in Georgia, 404-892-7651.

Name _____

Address _____

City _____

State _____ Zip _____

Mail to: **EasyKeeper Ltd.** P.O. Box 77187, Atlanta, Georgia 30357



Indian Tobacco

Q: I'd like any information you can give me on kinnikinnick, the American Indian tobacco. I've been told the stuff gives a head akin to bad drunkenness, but I'd like to make sure.

—Leo Smith, Calgary, Alberta, Canada

A: *Kinnikinnick, a ritual blend of various herbs varying from tribe to tribe, was an important part of certain ceremonial rites. Also called chanshasha, the mixture's main ingredient was the inner bark of the red alder or red dogwood. This was almost always mixed with other substances because of its harsh, bitter taste. The most common other components were the strong Indian Ree twist tobacco and certain sweet herbs like Sweet Ann root.*



Jack Abraham

Kinnikinnick: the original Mohawk toke.

The pipe of kinnikinnick was ceremonially filled with chopped herbs and offered to the spirits of the north, south, east, west, earth and sky, so that the pipe bowl symbolized the entire universe and its harmony with humanity. Long vanished except on a few reservations, kinnikinnick is now being commercially made and sold by the Mohawk Nation at Akwesasne, near Rooseveltown, New York 13683.

Filing Suit

Q: I recently bought an expensive ruby ring that turned out to be colored glass. I want to take the swindler to court to get my money back, but because of the price I paid I can't afford a lawyer. What can I do? *—Stan Donnell, Schenectady, N.Y.*

A: *If you want to sue for damages, many lawyers will work on a contingent fee basis, that is, you pay them a prearranged percentage of whatever the court awards you, if you win.*

However, if you have a lot of free time, you can also argue the case yourself, acting as your own attorney in a process known as in pro per. *The first step is to locate a nearby law library and do some browsing. Get a copy of the rules of the court you're thinking of bringing your case to. The worst mistake you can make is a procedural error like missing the date for filing a form. This can get your case dismissed in a hurry.*

Read part of the law encyclopedia called American Jurisprudence *(second edition) to learn some terminology, then go to a law dictionary and look up the crime committed against you. This will refer you back to the relevant sections of* American Jurisprudence. *Then you must study the law and previous cases outlined there until you have solid arguments for your side. When you feel you are ready for your day in court, use the* American Jurisprudence Practice and Pleadings *books to help you fill out the necessary forms for filing your suit.*

Khat Importation

Q: If khat can't grow in the United States and doesn't stay potent long enough to be shipped here, how about a chemical extract—like the one made from coca leaves. At the moment that would be legal, right? *—G. Breed, King of Prussia, Pa.*



Frilet/Sipa/Black Star

Khat: Part of its magic comes from vitamin C.

A: *There is certainly no chemical reason why it couldn't be done. Khat's main ingredients are cathine (a variant of ephedrine called nor-pseudo-ephinephrine), cathidine and cathinine, with traces of amphetamine. The fresh leaves also contain a hefty amount of vitamin C, which helps offset the uncomfortable side effects from heavy use of the speedy compounds. Any attempt at extraction should try to retain this ingredient. The legal situation is hazy, however. A cocaine-type concentrate might be illegal under current law; if not, you can bet on a hasty amendment to plug the loophole. But such considerations rarely stand in the way of progressive business.*

Origins of the Frisbee

Q: An old-timer who lives up the road in one of those trailers that looks like a silver bullet saw us playing Frisbee the other day and said it reminded him of playing with salecats back in the '50s. What are salecats? *—Terry Snyder, Route 6, Ill.*

A: *A sailcat is a feline quadruped leveled on a stretch of asphalt by an oncoming vehicle, i.e., a flat cat. If the compression is evenly made, the animal's entire bone structure is jellied, but the remains are stiffened by a nervous reaction of the ganglia, thus enabling one to hurl (or "sail") it about like a furry discus for considerable distances.*

Marijuana and Memory

Q: I've been smoking weed for eight years now and don't plan to quit, but I'm concerned because my memory doesn't seem to be the same anymore. Is there any evidence that pot damages the memory? Maybe I'm just remembering it better than it once was.

—Name and address withheld

A: *There's no question that grass sometimes impairs short-term memory while the smoker is stoned, since the flow of associates and tangential pulses of neural energy zigzag through the user's entire realm of experience so fast that even remembering the beginning of a sentence can become a task so involved that it's almost... However, several studies comparing pot smokers with nonusers have shown no difference in memory ability while both groups were unstoned.*

During the high, though, there may be some interference with memory storage. Detailed tests at the University of Kentucky measured recall after reading. The results seemed to indicate trouble in the transfer of information from short-term memory to the brain's long-term storage banks. Hence, the prose samples made a bigger impression on the stoned subjects, but next day they had a harder time than the straight ones in remembering what the readings were about.

Tobacco smoke also seems to affect the memory, according to recent UCLA research. Nicotine was found to measurably impair short-term memory for as long as two days.

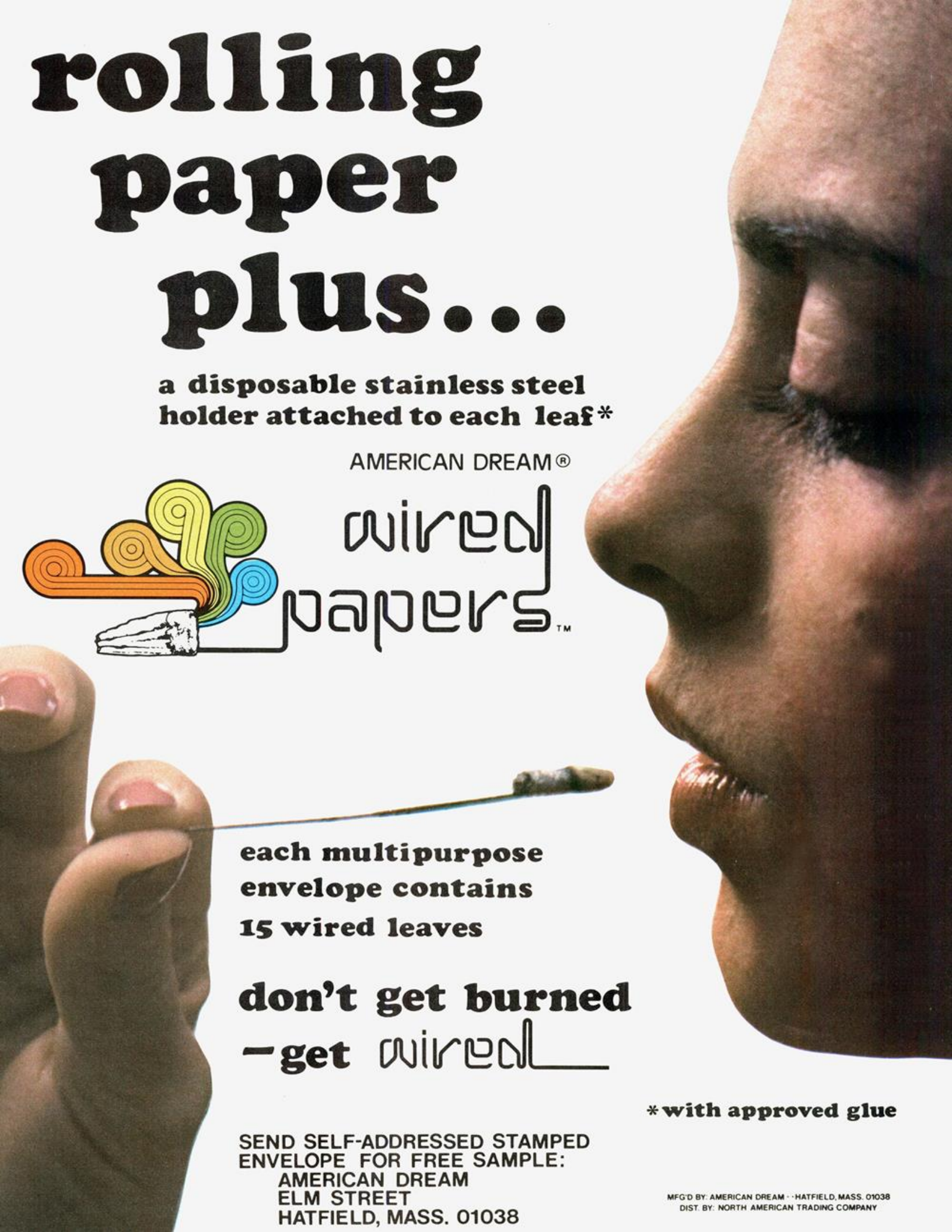
Questions on all topics will be considered for "Adviser," including all highs, health, sex, law, science, technology, music, etc. Only those of most interest can be answered. Please be specific. Anonymous queries are accepted.

rolling paper plus...

a disposable stainless steel holder attached to each leaf*

AMERICAN DREAM®

wired papers™



each multipurpose envelope contains 15 wired leaves

don't get burned —get wired

***with approved glue**

SEND SELF-ADDRESSED STAMPED ENVELOPE FOR FREE SAMPLE:
AMERICAN DREAM
ELM STREET
HATFIELD, MASS. 01038

MFG'D BY: AMERICAN DREAM · · HATFIELD, MASS. 01038
DIST. BY: NORTH AMERICAN TRADING COMPANY

Bugged?



Know whom you're dealing with

When you are contacted by a "friend of a friend" do you often worry about whom you are really dealing with?

Protect yourself with our exclusive countersurveillance equipment.



BUG ALERT
EJ7

Detects and alerts you to the existence of a bugging device concealed on someone in your presence or planted in the room. Easily concealed in your hand or pocket, it gives you a warning by a tiny signal light. Once activated, light stays on until switched off.

TAP ALERT
B409



Alerts you to virtually any wiretap that may already be on your phone, as well as taps added later. Built-in telephone analyzer with precise digital readout eliminates any guesswork. Tests for both on-hook and off-hook taps.

Comprehensive report on how to protect yourself against phone taps and room "bugs" also available. $20. To order, contact *Jeff Clive (212)682-4731) or Walter Scott (202)659-3433 or mail coupon to:*

ANTI-WIRETAPPING & ANTI-BUGGING CORPORATION OF AMERICA
605 Third Ave. New York, N.Y. 10016

☐ Yes, I'm interested in your electronic countersurveillance equipment. Kindly send me further information.

☐ Check enclosed for Report on Protection against Bugs and Taps.

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

TELEPHONE _____

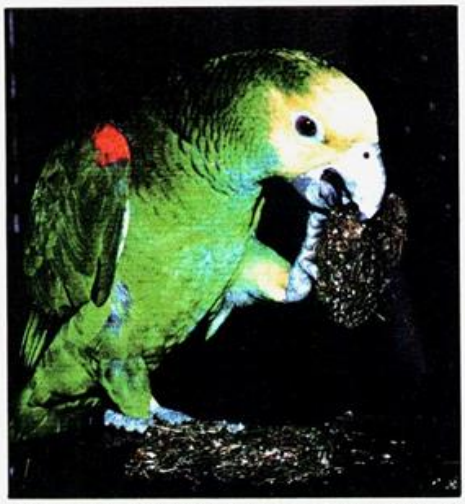
Dealer inquiries invited.



We're finally focusing on the winners in the High Times Dope Photography Sweepstakes, but we need an extra month to evaluate the more than 2,500 entries. So look for the announcements in the September issue, while for now we present a selection of hopefuls that echoes the sentiments of the late Harry J. Anslinger: "Marihuana smokers are nothing but depraved animals..."

Buds—the Beer of 'Keets

This bird ain't no dodo—them's primo 'lumbo buds he's munchin' on. Come to



think of it, why the fuck am I wastin' my stash on him? I'm the dodo!

—Joe F., Amawalk, N.Y.

Nothing But a Pound Dog

Our dog Snooks recently gave birth to six healthy pounds of top-notch smoke (must

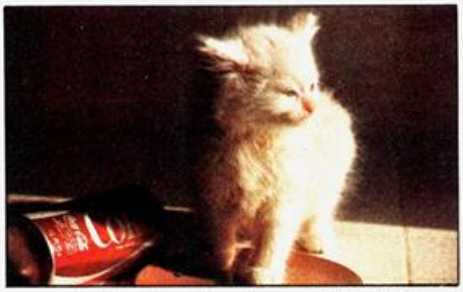


be Afghani). Here she is suckling the frisky young 'uns in our living room.

—Name withheld, Bergen County, N.J.

Man, This Cat Really Blows

Like, hi there fellow felines. I had my groovy human Dave take this shot of



yours truly about to do an old-fashioned paw snort. I can afford the stuff from selling nickel bags of catnip to the gang in our alleyway. *—Coke, Long Beach, Ca.*

A Bad Case of Crabs

I came home from a party late one night and to my astonishment found my pet crab Binky toking up the last of my



Moroccan hash in the bathroom. Later he stumbled into the kitchen and began to hump the electric can opener. That crab is driving me crazy!

—The Freak, Greenport, N.Y.

Furry Freak Squirrel

It never fails, any time I see a group of freaky-looking humans hanging out in the park, I wait till they leave and then patrol



the area. I usually find some roaches or even a joint left behind. Then I go home and get whacked while watching "Wild Kingdom" on the tube.

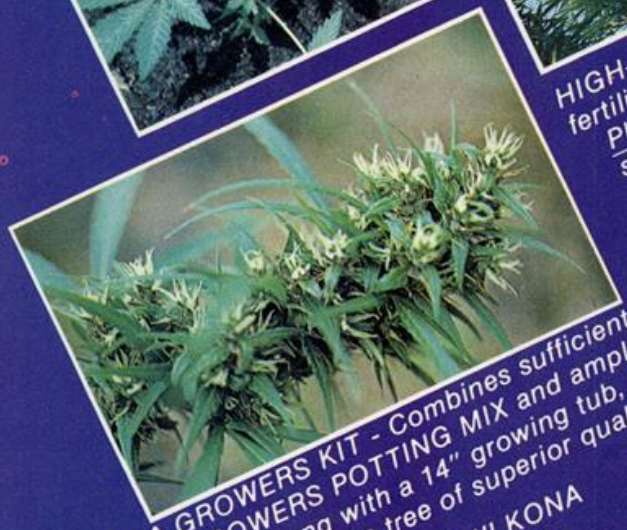
—Donald Squirrel, Ypsilanti, Mich.

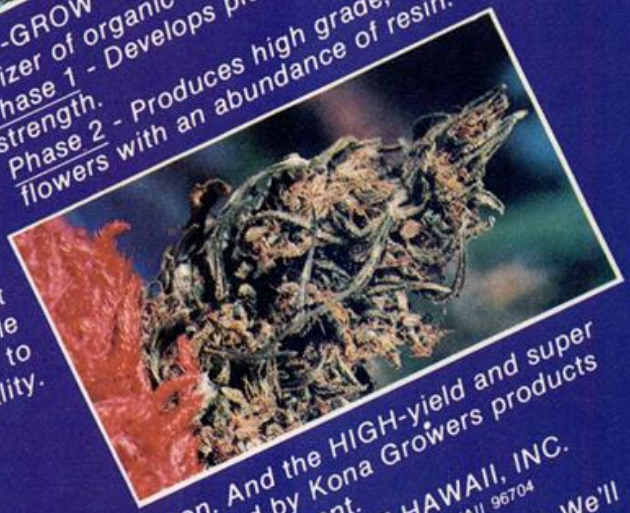
HERE IS YOUR HAWAIIAN CONNECTION

FROM THE PEOPLE WHO KNOW HOW TO GROW!









KONA GROWERS POTTING MIX - Start your plants off right with our special volcanic mixture of natural Hawaiian elements, straight from the Kona Coast area of the Big Island.

DYNA-GROW - Totally Organic Growth and Flower Fertilizer.
Phase 1 - Promotes large plants and lush foliage.
Phase 2 - Greatly enlarges flower size, stimulates maximum resin content and a healthy yield.

HIGH-GROW - Highly productive time-release fertilizer of organic and synthetic bases.
Phase 1 - Develops plant to maximum size and strength.
Phase 2 - Produces high grade, full-bloom flowers with an abundance of resin.

KONA GROWERS KIT - Combines sufficient GROWERS POTTING MIX and ample fertilizers, along with a 14" growing tub, to produce a tree of superior quality.

This is the growing season. ACT NOW! KONA GROWERS OF HAWAII, INC. offer you the growing magic of Paradise. Our Hawaiian products provide the same Superior growing medium and highly effective plant fertilizers that make Hawaiian grass the greatest! These island products insure strong root development, the growth of healthy foliage and the ultimate in potent flower yield. So hurry, give your plants, and yourself, a taste of Hawaii with our complete feeding and growing system. You'll be proud of the strong, healthy, easy to grow plants you'll be enjoying soon. And the HIGH-yield and super potency provided by Kona Growers products assures your enjoyment.

KONA GROWERS OF HAWAII, INC.
BOX 228, CAPTAIN COOK, KONA, HAWAII 96704

Fill out the coupon and mail it today. We'll immediately send you (discreetly boxed) Hawaii's best so you can grow DYNAMITE!

Growers Instruction Manual included in all orders.

SEND ME HAWAII'S BEST NOW! KONA GROWERS OF HAWAII, INC. P.O. BOX 228, CAPTAIN COOK, KONA, HAWAII 96704

QUANTITY:

☐ KONA GROWERS KIT(S). INCLUDES (3/4 CU. FT.) 14" TUB, AND CHOICE OF 4 LBS. ☐ DYNA-GROW OR ☐ HIGH-GROW @$33.75

☐ KONA GROWERS POTTING MIX (3/4 CU. FT.) @$22.50

☐ DYNA-GROW ORGANIC FERTILIZER PHASE 1 & 2, 4 LBS. TOTAL @$12.00

☐ HIGH-GROW FERTILIZER PHASE 1 & 2, 4 LBS TOTAL @$12.50

NAME

ADDRESS

CITY, STATE, ZIP

TOTAL ENCLOSED
Certified Check or Money Order
(Shipment held until personal checks clear.)
Charge to my ___MASTER CHARGE ___VISA

CARD NUMBER EXPIRES MASTER CHARGE BANK NO.

SIGNATURE

☐ Please send me information on larger quantities

Hawaii residents add 4% tax.



For a poster size, full color reproduction, send $2.00 to:
Bambu Sales, Inc., Dept. HTA, P.O. Box 691, Westbury, N.Y. 11590



The Pocket Fisherman

by Scott Cohen

When hunger sets in, set out for the great outdoors. If steak is your staple, you can't go out and shoot a cow, but if your dish is fish, you can grab your pole and go fishing.

Take the example of Pete Wernick, who grew up in Las Vegas, where there's not much fishing. Most people don't expect a Vegas boy to be much of an angler, but Pete's got fishin' fever.

"When I was about five years old," Pete recalls, "I saw a picture in a book of a fish, and it really shocked me. I wanted to get closer to these fish, and then I found out it was a whole sport."

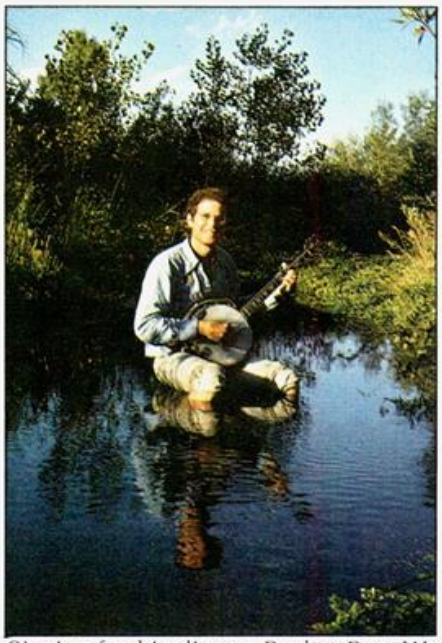
The same book had pictures of the fishing equipment of the day, so young Pete got Dad to buy him some of the sophisticated fly-casting outfits and the more rugged deep-sea gear. Since then Pete has idled devotedly with rod 'n' reel, stoned to the gills and happy as a fish. But a fast-breaking fisherman like Pete can find traditional equipment a hassle.

"First of all," Pete explains, "you need to have your tackle handy. You can't take a big suitcase with you everywhere you go. If you can have something that fits in your pocket, you'll have more room for beer and dope, and if you're driving along and see an opportunity to get your line in there, you can just pull the car over, hop out, sink in your bait and go crazy. You can catch some pretty big fish that way, and when you're done you just put your rod back in your pocket and you're back on your way."

Pete saw the Pocket Fisherman advertised on the back page of a comic book—he had already seen the Popeil Veg-O-Matic and Kitchen Magician commercials on television—and liked the way the rod flipped out of the sturdy plastic handle and how the hook and sinker were also neatly stashed inside. Pete immediately filled out the coupon, enclosed $19.95 and mailed away. Two weeks later Pete was gone fishing.

Pete has run his line out everywhere from Sheepshead Bay in Brooklyn to the raging Columbia River in Washington, and he has reeled in everything from fluke to rainbows. His favorite bait is worms; his favorite catch is suckers. "You just fry 'em up," Pete exclaims. "They're a little slimy but sure taste great."

Today Pete hangs his hat in the mountains of Colorado. As it happens, a bunch of his drinking buddies are also avid Pocket Fishermen. One day while sitting around the bar swapping fishing stories, they got together and organized the Loveland-Longmont chapter of the Pocket Fisherman Club, of which Pete is the treasurer.

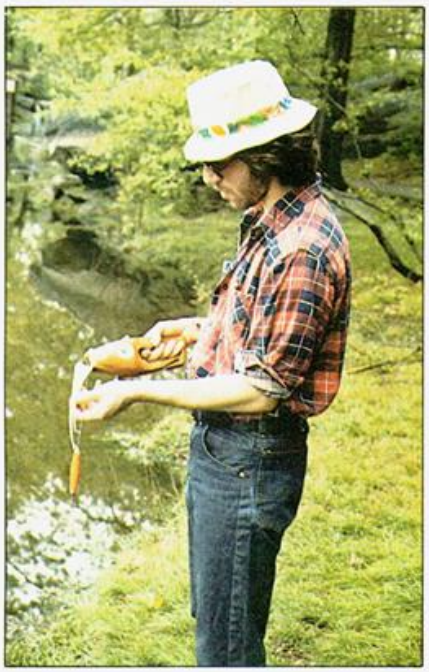


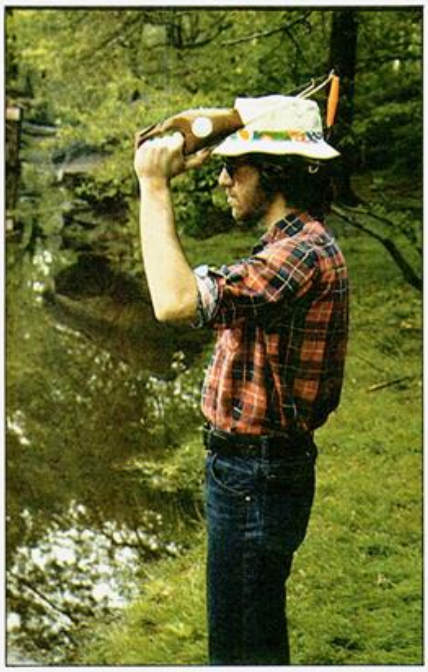
Singing for his dinner: Pocket Pete Wernick woos trout.

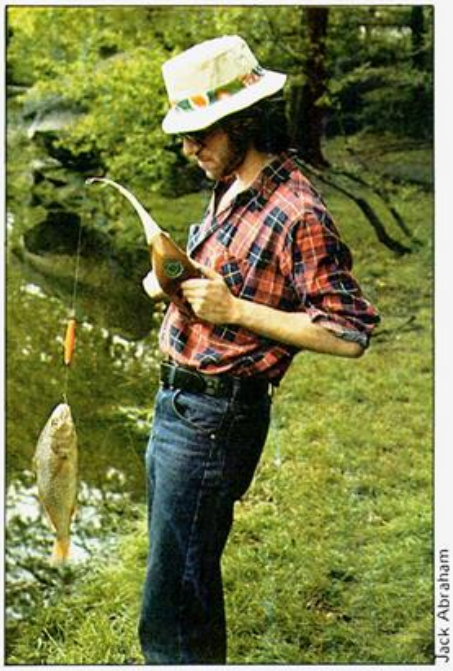
"Here's the perfect example of how the Pocket Fisherman gets the job done—where you couldn't get it done without one. When not fishing, I play banjo in a bluegrass band. We do a lot of traveling, and you can't carry all your fishing gear, if you have a lot of it, on an airplane.

"One time we were in Guatemala, and we played a few shows. On our day off we went out in a boat, and there was a five-foot marlin out there that I landed with my Pocket Fisherman. If it hadn't been for the Pocket Fisherman, I don't know what I would have done that day."

The marlin is the largest fish Pete has caught. "It made a mighty pretty picture," Pete adds, "but somehow the picture got away." ◘



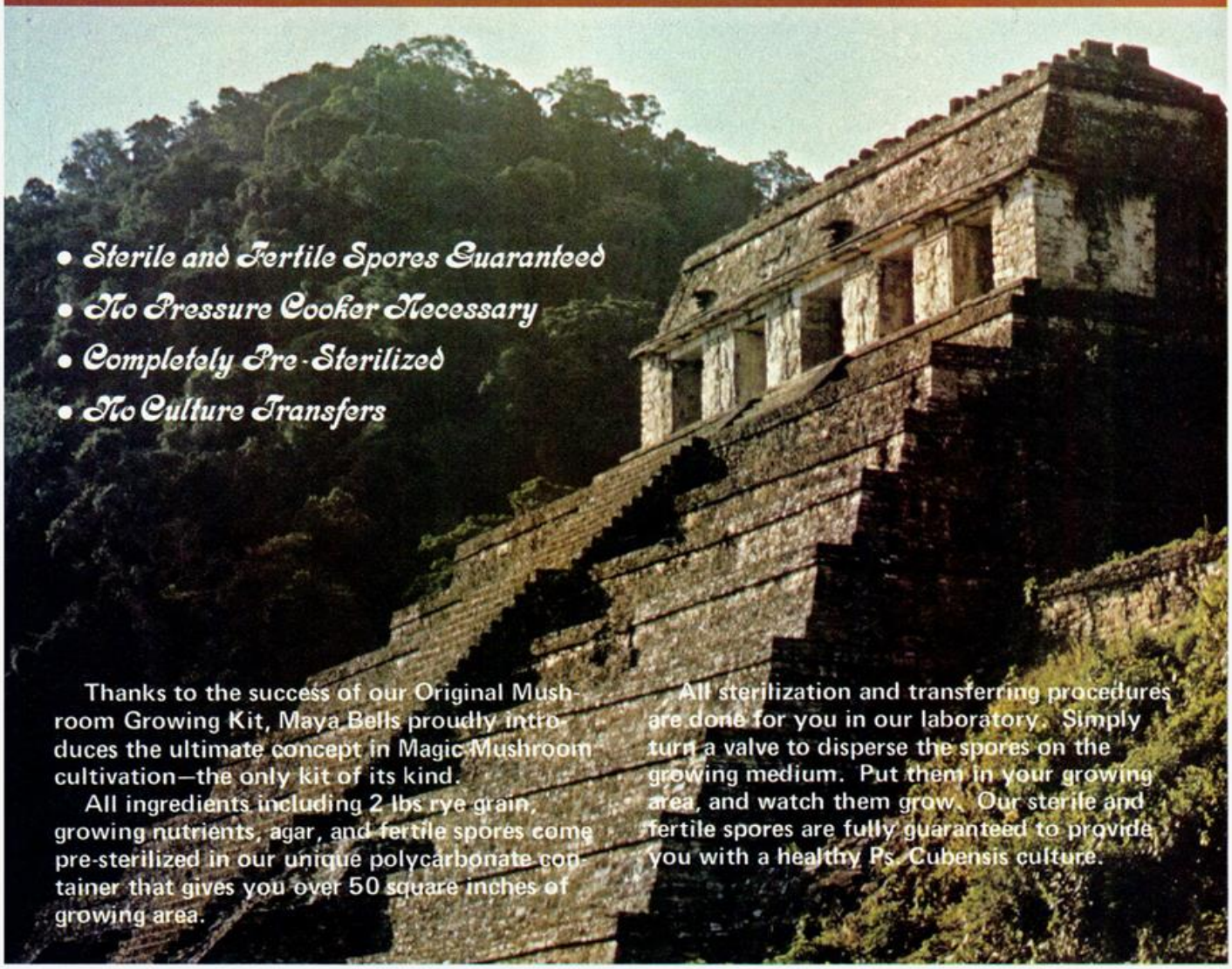




Jack Abraham

Quicker than you can say, "Roll me a joint," the pocket rod can angle an entrée.

The NEW no B.S. mushroom growing kit



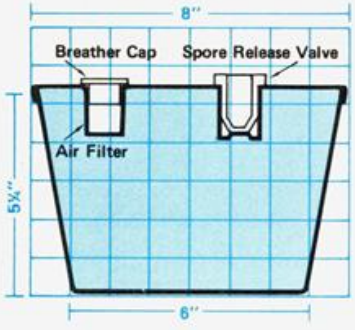
- *Sterile and Fertile Spores Guaranteed*
- *No Pressure Cooker Necessary*
- *Completely Pre-Sterilized*
- *No Culture Transfers*

Thanks to the success of our Original Mushroom Growing Kit, Maya Bells proudly introduces the ultimate concept in Magic Mushroom cultivation—the only kit of its kind.

All ingredients including 2 lbs rye grain, growing nutrients, agar, and fertile spores come pre-sterilized in our unique polycarbonate container that gives you over 50 square inches of growing area.

All sterilization and transferring procedures are done for you in our laboratory. Simply turn a valve to disperse the spores on the growing medium. Put them in your growing area, and watch them grow. Our sterile and fertile spores are fully guaranteed to provide you with a healthy Ps. Cubensis culture.

For those of you who have not made the trip to the magic land of the Maya we bring the trip to you.







Complete Kit

$25.00

Colorado Residents add 6% local tax ($1.50)

Maya Bells, Inc.
P.O. Box 26166
Lakewood, Colo.
80226

Send me _____ kits at $25.00 each, check or money order (includes postage & handling)

Name _____

Address _____

City, St., Zip _____

Cashiers Check or Money Orders shipped immediately



Energy Mags

by Gilbert Choate

Energy... it hums, it buzzes, it courses through the circuitry of the electric urban nervous system like adrenalinized amphetamine blood pulses beating in the brain of Charles "Texas Tower" Whitman, pounding like the bass line in "I Walk the Line" by Johnny Cash, throbbing out its message of power and force like a billion goose-stepping storm troopers, making cars and toasters spin and go, frying eggs, milking a million cows automatically and otherwise being useful.

Wind Power Digest's editor Mike Evans signs off with an optimistic "Have a windy day!"

And now it all threatens to come to a halt as oil supplies trickle out in the twenty-first century while nuclear-fission breeder reactors melt down in stupendous catastrophes and burn their way through the surface of the earth. Only by acting now can we ensure a lasting supply of self-sufficient energy for the future, and a whole new generation of magazines has sprung up to tell us what energy really is, how to get it, how to use it and how to conserve it.

The watchwords of the new energy movement are "wind" and "solar." At first I thought **Wind Power Digest** would be an ideal subscription gift for my Aunt Hester, a fine Christian woman of some eighteen stone, who could fart like a moose and often did in church. If her forces were harnessed, she could drive a hundred windmills or create another Dust Bowl. Actually, Wind Power Digest is a quarterly publication devoted to the use of wind energy as an independent energy source. Each issue contains articles, interviews and reviews of current developments in the field of wind energy.

And truly, free-blowing high-velocity air currents, or wind as we specialists call it, is a potent and abundant source of free energy, there for our taking. For centuries the power of the wind has served as a reliable and inexhaustible source of energy. Windmills pumped water and generated electricity for thousands of homes and homesteads long before the advent of so-called cheap commercial power. As the cost of conventional power sources continues to skyrocket, this simple and effective form of energy is once again gaining widespread acceptance.

With currently available technology, wind energy can be harnessed to generate electricity for homes, farms, light industry, water pumping and many sex aids. Wind Power Digest shows how you too can harness the power of the wind. Send $6 for one year (four issues) to Jester Press, 54468 CR 31, Bristol, Indiana 46507, and, as editor Mike Evans says, "Have a windy day." It's one of the most no-nonsense, practical-know-how magazines I've seen in a long time.

Even more popular than wind is solar energy, the absolutely free and 100-percent-effective rays of the sun as stored and recycled by so-called solar-power technology, basically a development on the old magnifying-glass trick. **Solar Engineering Magazine,** the official publication of the Solar Energy Industries Association, is a terrific publication particularly notable for its enormous variety of advertisements. All the solar biggies peddle their wares through it, and it's the best marketplace to scope out the state-of-the-art technology now available to the solar consumer.

SEM also includes many edifying articles on solar engineering and architecture, and practically the only question it doesn't answer is how to get a deep, rich, all-round tan even in the hard-to-reach spots. However, they're working on it, and to the best of anyone's knowledge we're



still light-years ahead of the Ruskies on this one. Send $15 for one year (12 issues) to Solar Engineering Publishers, Inc., 8435 North Stemmons Freeway, Suite 800, Dallas, Texas 75247.

What's true of Solar Engineering is

JOY INDUSTRIES
864 BROADWAY
NEW YORK. N. Y. 10003
212 686 3970 / 3971
SEND THE BIG HIT; GUARANTEED $4.
PLUS 50c POSTAGE/HANDLING
New Yorkers add 8% S.Tax
Money Orders Only

NAME

ADDRESS

CITY

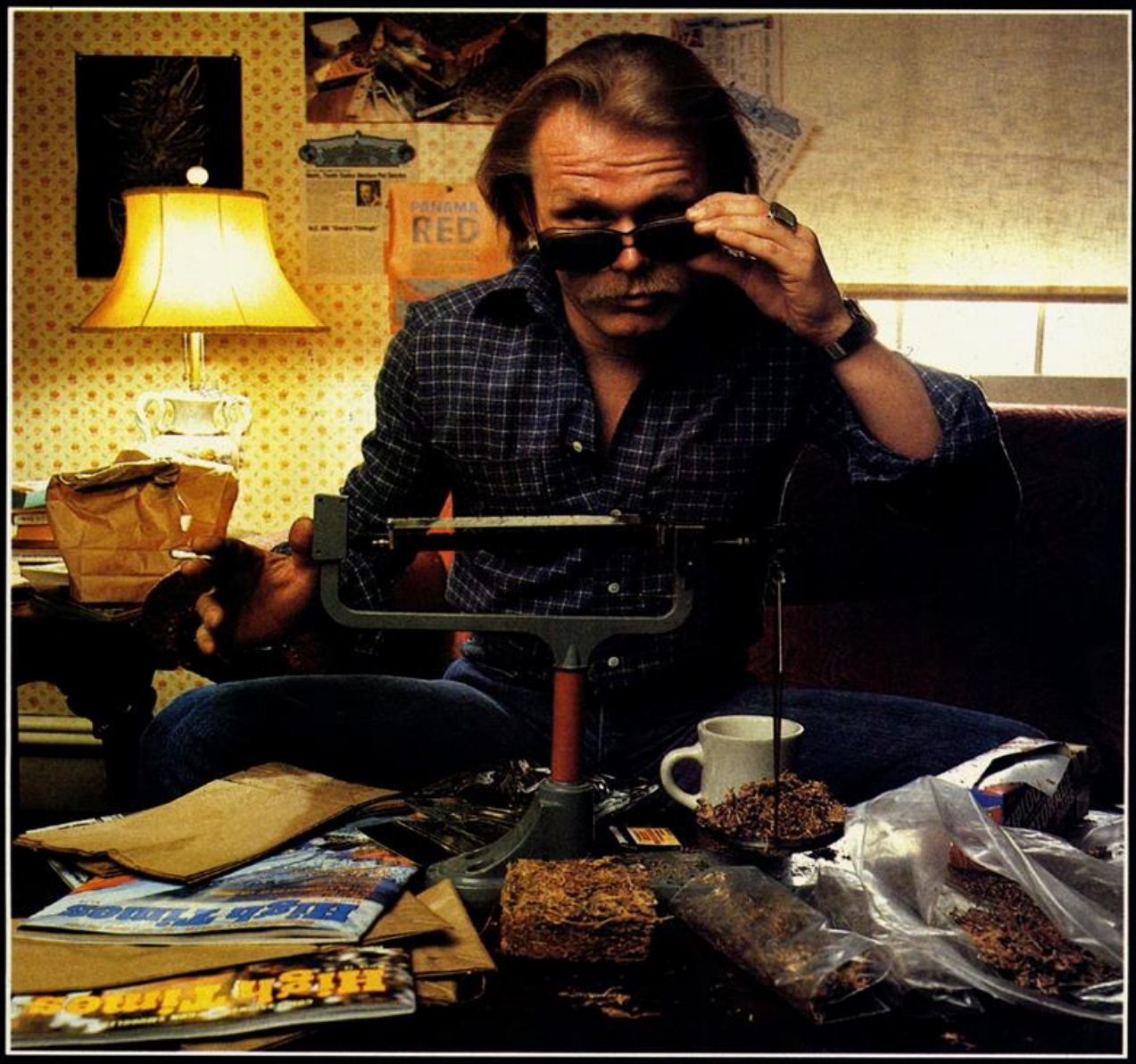
STATE
ZIP CODE

COLOR AND AMOUNT
BLACK BLUE RED



PENNSYLVANIA: U.B.C. GRAIN
800-523-8163
CHICAGO: ADAMS APPLE DIST.
800-621-4044
MICHIGAN: LENTER ENTERPRISE
313-338-9205
L.A. CALIFORNIA: PLANETARY DIST.
213-559-0800

"What, Me Subscribe?"



Okay, let's face it. Perhaps you're paranoid. You've certainly got enough reasons to be. Marijuana may be decriminalized in 10 states, but it's far from being legal. And you're probably one of those who are afraid to subscribe to *High Times,* although under ordinary circumstances you would jump at the opportunity.

Well, you can relax. Our mailing list contains 40,000 names, so what's one more? *High Times* is 100 percent legal. 4 MILLION PEOPLE READ HIGH TIMES EVERY SINGLE MONTH.* And they're not about to let the government's outrageous pot laws prevent them from getting the most up-to-date information there is on the dope scene.

So subscribe today. Rest assured *High Times* will be delivered to you 12 times a year, hassle-free, in a plain brown wrapper. And you'll save $5 over the regular newsstand price.

Enclosed Please Find Check ☐ Money Order ☐ For:
In U.S.A.: ☐ $16 for 12 issues
☐ $29 for 24 issues
In Canada: ☐ $18 for 12 issues Payable in U.S. funds
☐ $33 for 24 issues

Name_____

Address_____

City_____ **State**_____ **Zip**_____

High Times Subscription Dept. 7808 ML
P.O. Box 965 Farmingdale, N.Y. 11735

*Seasonwein Readers Demographic Survey, 1977

likewise accurate of **Solar Age,** yet another fine, slickly printed, handsomely designed periodical created by knowledgeable, socially responsible solarists to educate the public on the healthful and economic benefits of solar energy. As its name implies, Solar Age is dedicated to the idea that we are, of necessity, moving into an age when solar energy will be the predominant fact of life, much as steam was the preeminent characteristic of the late great Age of Steam. Its visionary, yet practical utopianism blends nicely with a highly practical, popular-mechanics format that anyone can understand by sending $20 for one year (12 issues) to SolarVision, Inc., 200 East Main Street, Port Jervis, New York 12771.

Less oriented toward the current corporate land rush into the beckoningly lucrative solar-energy investment field is **Alternative Sources of Energy,** an inexpensively but efficiently produced bimonthly journal of the alternative-energy arts. Typical articles include "Passive Solar Home for Northern Climates," "City Home Goes Solar," "Arizona's Solar State Park," "Roll Yer Own" and many other useful instructive pieces that give the impression that alternative energy has not become the property of the wild and ka-*ray*-zee R & D guys at Exxon but is in fact the great idealistic cause of all forward-minded working peoples of the world today. Send $10 for one year (6 issues) to Alternative Sources of Energy, Inc., Route 2, Milaca, Minnesota 56353.

Among nonspecialist magazines, you can always count on **Popular Science** to print at least one good article on solar stunts you can do yourself, and even if it didn't, it would be worth reading regularly just for the small ads ("Be a Spinach Inspector! Make Big Money," "Learn Cuisinart Repair!," "Find Yourself a Fortune with a Gypsum Detector!," etc.). Popular Science, the "What's New Magazine," is published by the great Times Mirror Magazines company and is sold on most newsstands. Send $7.95 for one year (12 issues) to Box 2871, Boulder, Colorado 80302.

If you live in the Midwest, you certainly won't want to be without **Acorn,** the magazine of "News about Midwest Energy Alternatives." It's not such a great magazine, but it does carry lots of inspiring stuff that echoes the Midwestern tradition for turning a cause, whether it's alternative energy, free silver or the cold war, into a holy-rolling crusade, and it only costs $4 for six issues from Acorn, Midwest Energy Alternative Network, Governors State University, Park Forest South, Illinois 60466.

The nice thing about these alternative-energy magazines is that they enjoy a sort of community, a shared state of mind, and are constantly plugging each other, so just get one and pretty soon you'll be hearing about others, which saves your reporter a hell of a lot of energy right there. ◘



R-Z30 says: "Yes friends, it's true. Nine out of ten cybernetic organisms tested preferred the Rizla Rolling System 10.4K to 1.3. In tests conducted among a random sampling of cyborgs, even those with a low punchcard mentality were able to crank out exquisitely-rolled smoking tubes with no malfunction.

And aside from their operational ease and elegance of style, Rizla remembers that all rolling machines, like all cyborgs,are not created equal. Which is why Rizla has created an individual machine for every size paper they make.

The Rizla System. It's the best. I swear to HAL."



For a full color heat transfer of R-Z30, a Rizla adjustable double-width rolling machine and three booklets of Rizla double-width rolling papers send $5.00 (or $3.50 plus five booklet covers from any Rizla rolling papers) to Rizla at the address below.

Name _____

Address _____

City _____

State _____ Zip _____

Please allow 4 weeks for delivery.
Offer Expires 12/31/78
California residents add 6% sales tax (HT-78)

RIZLA

RIZLA PRODUCTS, U.S. Inc., 8601 Hayden Place, Culver City, CA 90230

Stone Wood Imports

Presents

STASH TINS & JOINT CASES



Brass stash tin
CA 06 $11.00



Brass joint case
CA 11 $13.00





Brass joint case
CA 13 $13.00



Leather double joint case
CA 14 $14.00



Leather double joint case
CA 15 $14.00



Nickel plated joint case
CA 10 $7.00





Nickel plated double joint case
CA 16 $10.00

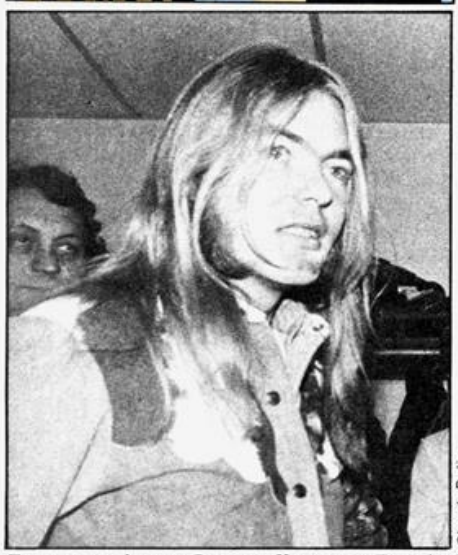


Copper inlaid stash tin
CA 04 $7.00

Send cash or money order(include 50 cents postage per item) to: Stone Wood Imports, 1480 Kleppe Lane, Sparks, NV 89431. Catalog of other fine products included FREE with purchase (otherwise send $1.00, refundable with first order.)

Stores. Send for free catalog of our complete line of goods.





Chuck Pulin

Former rock star **Gregg Allman,** at Rose's Cantina in Atlanta, turned a deathly shade of pale after a woman pretending to be a groupie jumped onstage and whispered in his ear, "You fucking informer!" Allman's grand-jury testimony helped land his former road manager **Scooter Herring** a conviction for cocaine possession. Immediately after the recent Atlanta incident Allman was committed to a psychiatric hospital for "rest and relaxation." Scooter Herring's conviction was recently overthrown by a higher court. Herring has, in fact, never spent a day in jail, according to Allman pals.



P. Dykstra/Warner Bros.

When **Root Boy Slim and the Sex Change Band** played Washington, D.C.'s Cellar Door recently, guess who bought 50 tickets—the White House gang of good ole boys on **Jimmy Carter**'s appointments staff. Discovered by **Walter Becker** and **Donald Fagen** of **Steely Dan,** Root Boy's big hits include "I Used to Be a Radical," "Boogie Till You Puke" and "Jailed in Jacksonville" ("All I had was a roach it's true / Told the pigs what they could do / Then they found a coupla pounds / Too bad that cocaine was around").

Look out for artist **Diego Cortez**'s book *Elvis in Germany* about a hot summer romance that **Elvis Presley** once had with a German blonde who turned out to be a transvestite.

Atlanta-based band **The Nobz** include a song in their act called "Disco Chainsaw," in which lead guitarist **Tim Trautman** appears to be slicing off his foot with a chain saw. Actually the shoe is at the end of an artifical leg. Trautman moonlights as a prosthetics technician in an artificial-limb factory.



Wide World

A year after lobbing a banana cream pie into the face of Ohio Governor **James A. Rhodes,** the man who called out the National Guard for the Kent State shooting, Yippie **Steve Conliff** is running for governor of Ohio himself against incumbent Rhodes. Conliff was one of the students shot at by guards during the 1970 Ohio campus Cambodia protest. If elected, Conliff promises an "excess profits" tax on fat corporations. "I may be out of control," says wild-haired candidate Conliff, "but who controls my opponent?"



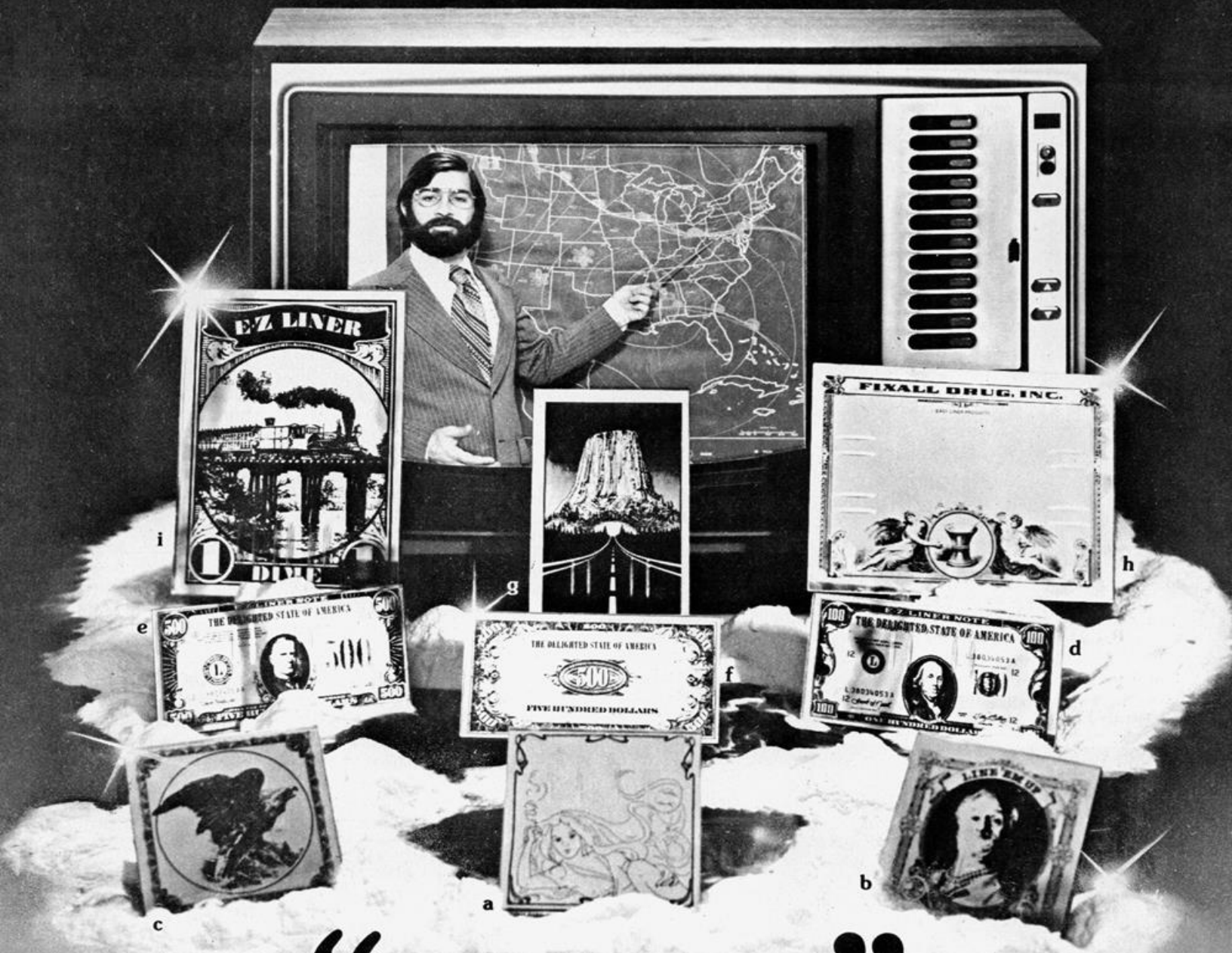
Chuck Pulin

Former *High Times* executive editor **Pamela Lloyd** has switched from print to electronic media—now she stars in "Sinsemilla Street," a cable TV show that tells home viewers how to grow pot. Pam keeps track of her plants on a chart. One plant is four feet high.

Mick Jagger, who first swaggered across the silver screen in Nicholas Roeg's *Performance,* will soon star as peyote eater Antonin Artaud, founder of the Theater of Cruelty in post-World WarII Paris,in **Mark Reichert**'s forthcoming film *Wings of Ash,* which will begin shooting in September in France and Mexico. **Andrea Marcovicci,** who played Woody Allen's girlfriend in the anti-McCarthy *The Front,* is back as Artaud's horny but unfulfilled groupie, racy diarist Anais Nin.

—Harry Wasserman

Tonight's Forecast



"snow"

There is a high front bringing snow to much of the nation tonight. Light to heavy accumulation is expected. We urge our viewers to prepare for this high front with quality mirrors from Easy Liner. Precut grooves, beveled edges and a cork backing are just a few reasons why these mirrors are so popular. And there is an Easy Liner to suit the most discriminating tastes. Hurry to your neighborhood head shop before his supply runs out.

Easy Liner

send		send	
____ a	8.95 ____	____ f	8.95 ____
____ b	8.95 ____	____ g	10.95 ____
____ c	8.95 ____	____ h	15.95 ____
____ d	8.95 ____	____ i	15.95 ____
____ e	8.95 ____	Total	____

Calif. res. add 6½%
add 1.50 postage and handling

Name _____

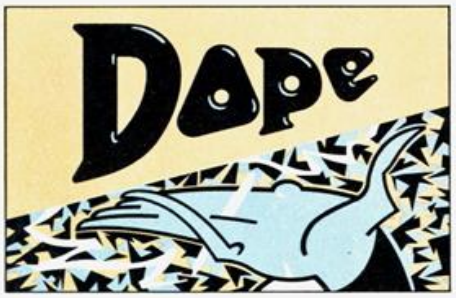
Address _____

City _____ State ____ Zip _____

Lenter Enterprises (313) 338-9205
790 Industrial Ct. Bloomfield Hills, Mich. 48013

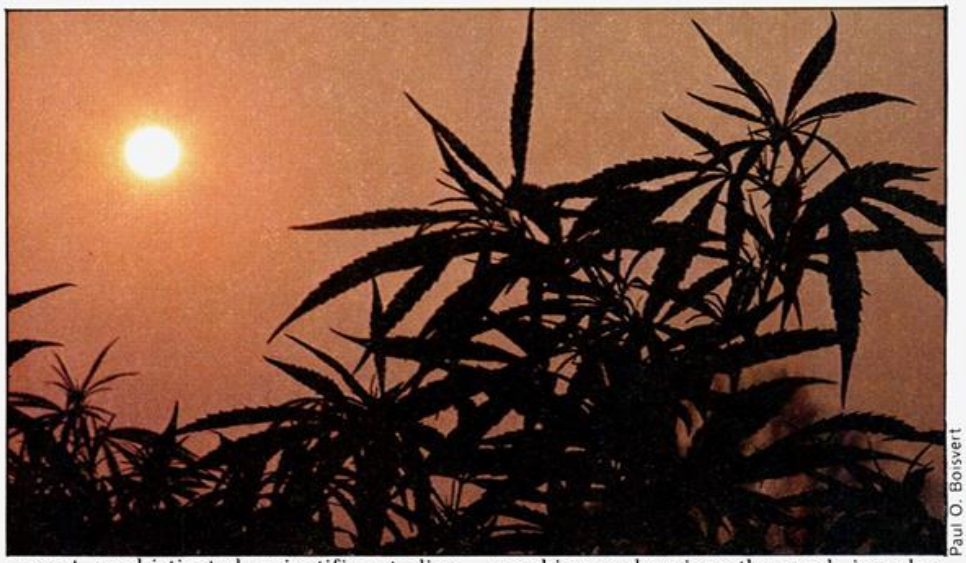
Paraphernalia Head-Quarters (415) 786-3313
26203 Production Ave., Hayward, Ca 94545

Easy Liner Products, Inc. (408) 988-6769
545 Aldo Ave. #7 Santa Clara, Ca. 95050



High Energy

by "R.," Dope Connoisseur



Paul O. Boisvert

To prove a point about cannabis and energy, let me tell you a story about a strange scene I witnessed in the cockpit of an Air India 707 charter some years ago.

It was 5 A.M. and we were five miles high over the Atlantic, flying into a sunset, heading for London's Heathrow Airport. The three-man Air India flight crew were all Indian by birth and, as it turned out, quite fond of hashish. Some friends of mine made friends with the crew, insinuated themselves into the cockpit and—the better to groove on the sunrise that stretched across the horizon—began passing a pipeful of potent Nepalese around the back of the cockpit.

To my surprise I saw the copilot and the navigator intercept the smoking bowl and draw deeply on it. Although I was a little worried in my Western way about this, the chief pilot had just taken over the flight controls after a nap, and I figured that as long as he kept straight he'd be able to bring the big jet in for a landing without any trouble.

Then I saw the pilot reach out for the hash pipe. He kept it for quite a while, puffing merrily away as he banked the jet and we began to spiral down into the approach pattern. Then he proffered the pipe to one of my friends, rubbed the last bit of sleep from his eyes, smiled benignly and announced, "Better than coffee."

What a landing. The cockpit was filled with hash-high heads. Only one of us actually had control of the stick, but we all seemed to be piloting the plane in on its graceful glide, *oo*hing and *aaa*hing at the sensuous swoops and swivels the pilot seemed to throw into the approach pattern for the sheer pleasure of the ride, then skimming in above the hedges to gently kiss the landing strip at just the right spot, when with a rush we roared to a stop.

The hash-smoking pilots had executed a smooth and precise touchdown, perfect by the strictest Western standards. I cite this in opposition to the common misconception that cannabis consumption is incompatible with complex, serious work, that pot drains energy and initiative.

It is becoming increasingly clear from recent sophisticated scientific studies, such as that of Dr. Vera Rubin on the chronic ganja smokers of Jamaica, that such puritanical assumptions about pot and the work ethic are "culture bound," as the anthropologists say, rather than physiologically determined by the pharmacology of the pot plant.

We can divide those people who mouth misleading platitudes about pot into two categories: the Hopeless Jerks and the Merely Misguided Jerks. You can tell the Hopeless Jerks easily enough: they're the ones who can't just politely decline a proffered joint but feel compelled to make a tiresome speech about how marijuana "just makes them sleepy." Your basic Hopeless Jerk is an overweight prematurely middle-aged person who never gets high but feels defensive enough about it to try to portray himself or herself as a "natural" high-energy person as opposed to what he or she imagines as perpetual sleepyhead smokers.

One dealer had a theory that pot smuggled by airplane was more high energy than pot that came by sea: "It's the ionizing radiation up there."

Merely Misguided Jerks are, on the other hand, more likely to say such things as "Sure I like to smoke to relax, but I can't smoke and work" or "Sure I like to smoke, but not in the morning." These people are victims of the Dumb Alcohol Analogy: they've incorporated the puritanical assumptions that deservedly attach themselves to that depressant drug into their attitudes toward marijuana, which is a stimulant and antidepressant.

Basic reading for Misguided Jerks should be Dr. Rubin's studies of the effect of ganja in Jamaica, where those who take it are not bound by an assumption that smoking undermines the work impulse.

"The working people in Jamaica take it in the morning before breakfast to energize themselves," says Dr. Rubin in an interview in the June '78 issue of *High Times*. "They have a break in the field or wherever they're at work... We have a coffee or cola break: they have a ganja break to stimulate energy. Then when they go home they may have some before dinner to stimulate their appetite...When we asked them, 'Does it make you sexy?' they said, 'Well if you feel to, it does, or if you're 'mongs women, it does.' They understand the situational conditioning."

Situational conditioning. What that means is that grass doesn't just get you high in the one vertical dimension the word *high* suggests. It gets you *deeper into* things. The Indian pilot, not culture-bound by dumb assumptions, was inspired to elicit a more perfect landing from his technology because he could get more deeply into the process. The work/relaxation dichotomy is the wrong one to apply to grass. You can get deeper into work *or* play, more intensely engaged in listening to Mozart or making love. Marijuana doesn't drain energy from these engagements. On the contrary, if used widely it can be a dependable way of rekindling an internal soul-ar energy that the smog of civilization can't dim.

Some practical tips from the dope connoisseur about marijuana, work and energy:

1. Morning *is* the best time to smoke, but preferably *after* breakfast. Marijuana works *with* the body's neurochemical awakening processes, inspiring the gentle warmth of a sunrise within each neuron. The later it gets in the day the more dope it takes to get you high, so that it's economical and energy saving to smoke earlier in the day.

2. Decide before you get high what activity you most need and most want to get engaged in. Marijuana is great for increasing the excitement and engagement in an activity, but unless you decide

Shit to Gold

The **KLANDESTINE ISOMERIZATION KONVERTER**@, or **KIK**@, is a precision engineered, scientific appliance that turns *"shit" grade pot into paralytic weed.* Not only does **KIK**@ *increase marijuana potency,* but it also improves taste, smell and color of all grass with no weight loss. *Something to think about if you happen to be in the business.*



Warning: In some states it is illegal to increase potency or change the form of certain plant materials. Please check your local laws. Klandestine Research Lab does not advocate the use of the Klandestine Isometric Konverter for illegal purposes.

HOW DOES IT WORK?

All marijuana plants contain cannabidiols. A plants' potency depends on what percentage of these cannabidiols it is capable of converting into THC. **KIK**@ converts the remainder, thereby *dramatically increasing the herbs' potency by as much as 800%.*

With **KIK**@ you will also be able to inexpensively make super strength *pure hash oil, powerful lettuce opium, hashish* and the most lethal *opiated hashish* available.

WHY KIK@?

- **KIK**@ *costs you less* than any other ISOmerization appliance.
- **KIK**@ *works in just minutes*—other ISOmerizers take hours (many hours).
- **KIK**@ *is easier to use*—our advanced technology eliminates confusing controls.

DON'T GET RIPPED OFF – *GET RIPPED*

GET THE COMPLETE KIK@

$59.95

2/$109.95

KIK@ is a fully assembled appliance including chemicals

Your Money Back Guarantee

KLANDESTINE RESEARCH LAB

Guarantees that if you are not absolutely, 100% satisfied with the **KIK**@ appliance, return it in the original carton within 10 days for an *immediate refund.*

(Applies to Mail Order Only)

Capacity— From a nickel bag to more than one pound!

RETAILERS CONTACT: Primo Productions, 920 B'WAY, NYC, NY 10010 (212) 473-4003

KLANDESTINE RESEARCH LAB, INC.
P.O.Box 277, Roslyn, New York 11576

Yes, I've decided to **KIK**@ my habit. Please rush my order:

- ☐ Enclosed is my check/MO for $59.95. **KIK**@ pays shipping.
- ☐ Enclosed is $10. I will pay the $49.95 balance COD, plus shipping and handling fees of $3.00 (Total, $52.95).
- ☐ Enclosed is $1 for Klandestine Research Lab's Color brochure.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

(Do not send cash. New York residents add 8% sales tax.)

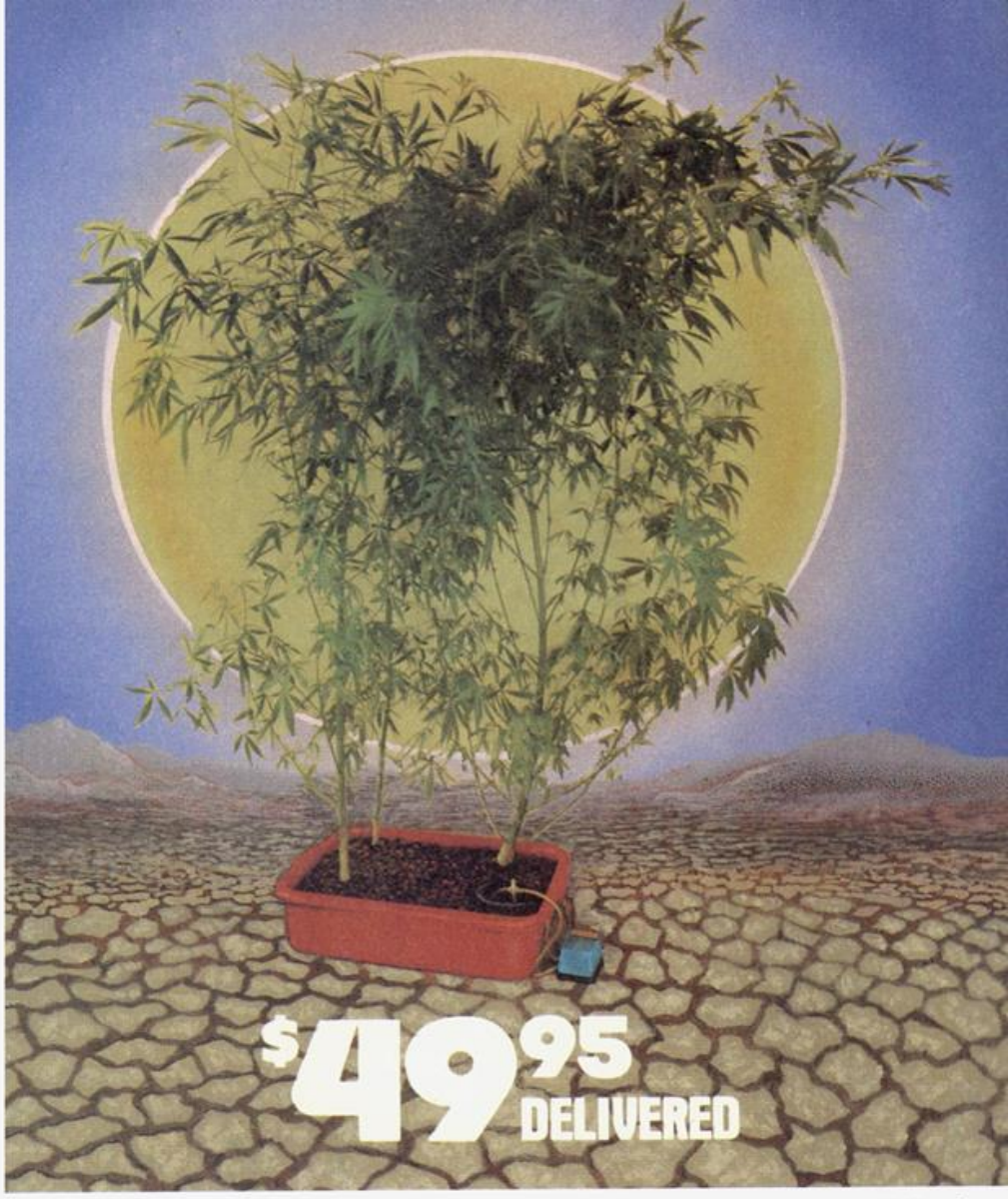
ahead of time, you could get too engaged in deciding what you might want to get engaged with, and—although this introspection is useful at times—that can be a waste of energy.

3. Some kinds of marijuana are more *up* than others, but looks are no longer decisive. In the past a good rule of thumb was that the lighter colored the pot the more "up" it was. Blond upland Colombians were considered more "energetic" than darker dreamier lowland varieties. One dealer I ran into had an elaborate theory that marijuana smuggled in by airplane was more "high energy" than the stuff that came by sea—that wallowing below sea level in the belly of a trawler for too long robbed some imported dope of the freshness that you could find only in newly harvested pot that passed through the ozone of high-flying smuggling flight patterns. "It's something about the way it's exposed to the ionizing radiation way up there," he said. "Also planeloads are smaller than boatloads, and people can round up a ton of primo for a plane, while to fill a boat with 50 tons you usually have to accept mass-harvested commercial-grade weed."

In any case all bets are off as to color, because the most recent marijuana market shift has seen the arrival of mass quantities of merely indifferent "commercial gold" lately—light-colored Colombian pot that looks good but doesn't have that high-altitude energy lift that the tint would seem to suggest. In fact in the midst of a glut of "commercial gold" the most interesting pot in town was a small quantity of milk-chocolate-colored Colombian buds that weren't as flashy looking as the standard gold but which yielded a wonderfully expansive, impressively energetic high—the kind that straightens up your posture and improves your breathing pattern.

4. Smoke *before* rather than *after* exercising. I've done both and I've known athletes who've done both, and *before* is better. Just as with sex, getting high before other forms of physical activity can release sensual energy within, which then can be channeled into graceful physical movements. I recommend getting high before running (I've done five miles a day stoned and found it an exhilarating addition to the joy of running) and before T'ai-chi, the Chinese slow-motion exercises specifically designed to channel energy into graceful patterns.

5. Smoke more dope for more energy. According to the New York Times Magazine, Bob Marley smokes one pound of Rasta weed *per week*. More than two ounces a day. Does Bob Marley seem like a low-energy person to you? What this means of course is that many of us who smoke less than that could be suffering from an energy-draining *marijuana deficiency*. I'm going to start remedying mine tomorrow morning. Like the Air India guy said, "It's better than coffee." ◘



HYDROPOT® ©1978

HYDROPOT® is a unique hydroponic system using constant controlled nourishment in a non-competitive environment. These three female plants are six feet in twelve weeks in a 2.5 sq. ft. **HYDRO**POT® . . . so far. Plants will grow to full maturity year-round, indoors or out in half the time. Fully automatic. Complete **HYDRO**POT® system includes 2 specially formulated nutrients, 30 lbs. of Kona lava, electric aeration pump, circulation system, nutrient dispenser, pH test kit, instruction manual and full guarantee. Completely reusable.

Pat. Pending. Dealer inquiries invited.

HYDROPOT®
AUTOMATIC HYDROPONIC GARDEN

Support NORML

© 1978



Cashiers Check or Money Orders shipped immediately.

Please send me my **HYDRO**POT® at $49.95 which includes all shipping and handling. (California residents add 6% sales tax).

Here is my check for $ _____

_____ "Toilet" T-shirts at $7.95 ea. includes shipping. ☐S ☐M ☐L

Total $ _____

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

VISA OR MC # _____

☐ ☐

EXP _____

SIGNATURE _____

APPLIED HYDROPONICS
1299 Fourth Street, Suite 308
San Rafael, California 94901

'New' from Hi-Lite Industries Inc.

10838 Washington Blvd.
Culver City, CA 90230
213-559-0800

46-07 Kissena Blvd.
Flushing, NY 11355
212-886-6464

'Amber Glass Bongs With the Look of Tomorrow'

** Available Today*



Upper South Distributors
100 Main St.
Rocky Gap, VA 24366
703-928-3815

Oat Willies
6307 Burleson Rd.
Austin, TX 78744
800-531-5000
512-385-1747

* *Stores and Truck Jobbers, Contact Distributors Listed*

Balto Energe
114 Penn Ave.
Wyomissing, PA 19610
Box 6015
215-376-7356

Mustlite
239 West Main St.
Norristown, TN 37814
615-581-7530
800-251-0973

Midwest Casting
5900 Northridge Ave.
Chicago, IL 60660
312-784-0800
800-621-6418

Planetary Wholesale
10836 Washington Blvd.
Culver City, CA 90230
213-559-0800

Kanko
125 Lunenberg St.
Fitchburg, MA 01420
617-342-9476

Joy Industries
868 Broadway
New York, NY 10003
212-686-3970

Lenter Enterprises
790 Industrial Court
Bloomfield Hills, MI 48013
313-338-9205

Impco
7509 Manchester
St. Louis, MI 63143
314-644-3404

Nalpac Ltd.
8700 Capital
Oak Park, MI 48203
313-541-1140

Atlantis Distributing
3910 Green Industrial Way
Chamblee, GA 30341
800-241-7290

Fine Line Products Inc.
2461 West Center St.
Milwaukee, WI 53206
800-558-9850

HIGHWITNESS NEWS
Aug.'78 No. 36

Break Frees Gringos Nabbed in 574-Ton Bust

RIOHACHA, COLOMBIA—It was a perfect Hollywood-style jailbreak, almost as if it had been staged for Charles Bronson. Seven days after a billion-dollar pot bust four young gringos—three Americans and one Irish national—were caged inside the same Guajiran jail that once housed Papillon. Suddenly there was a total power blackout: lights, phones, all communications to the outside were severed. Within moments, rescuers arrived in a National Police jeep, armed and dressed in official uniforms. Then quietly and efficiently—no noise, no gunfire, no blood—the four were sprung. A master break by any standards. A half hour after midnight a small private plane lifted off from a nearby highway and nosed northward.

The escapees—Americans Earl Richard Zerber, David Gary Foucher and Theodore Bruce Powel, with Desmond Robert Quinland of Ireland—were caught, along with a Canadian and nine Colombians on April 27 in the world's biggest bust, involving a billion dollars worth of boo. All 14 were nabbed aboard an American DC-7, and the police and Cartagena infantry battalion spent two days locating and destroying four separate caches of bagged commercial Colombian.

Colombian authorities originally estimated the quantity of dope destroyed to be 680 tons. American DEA officials later shortened the haul to 574 tons, worth $200 million wholesale. However, Colombian interrogators were unable to determine anything further about the men during the week they were in custody. The precise quantity or value will probably never be determined, now that the suspects have flown the coop.

The installation of the suspects at the Riohacha jail, which has been the site of at least four breaks in the past, has puzzled some observers. The jail was built in 1952 to replace the older prison, from which Papillon escaped; more secure facilities, some police say, could have been found nearer Bogota.

Salvador Arrieta, commander of the Riohacha guard, reported that the prison was thrown into darkness at 1:30 in the morning on Friday, May 6. Working in candelight, Arrieta heard a vehicle pull up outside the prison and went to the jail's outer fence to see two men emerging from an official "patrol" jeep. (The National Police often send such two-man teams out in the middle of the night to check up on prison guards.) "One of them had a lantern in his right hand, and I could see he had a corporal's insignia," Arrieta later said.

After the guard let the two through the prison gate, they turned their machine guns on him, took the keys to the jail, tied him up and left him to an accomplice outside the prison walls. In addition to the commandos' jeep, Arrieta saw a number of Ford "Ranger" trucks, apparently containing helpers and extra reinforcements.

The uniformed gunmen proceeded to the smugglers' room and yelled, "Gringos!" The four emerged at once, all fully dressed and apparently anticipating the break. The darkened prison was totally silent during the escape, and no alert had been sounded. But shortly after the break, Furnieles Negrete discovered the commander of the guard missing and the front gate left open. Negrete called a general alarm and then ran into the street where the patrol jeep stood with its engine running and doors open. He pumped several rounds into the jeep before discovering it was empty. "Far away I could hear the noise of the escape vehicles," said Furnieles, "toward the highway to Santa Marta, I believe."

It is estimated that within minutes of their escape, the four gringos took off in a small plane from the highway that joins Riohacha with Santa Marta. Since the break left no operational vehicles or telephones at the jail, a runner was dispatched to make a 20-minute trip to the local Command of Police so the escape could be reported.



"I begged for my life!" Commander of the Guard Salvador Arrieta tells reporters shortly after pot commandos overran his Riohacha prison and freed four suspects arrested in a record-breaking pot bust.

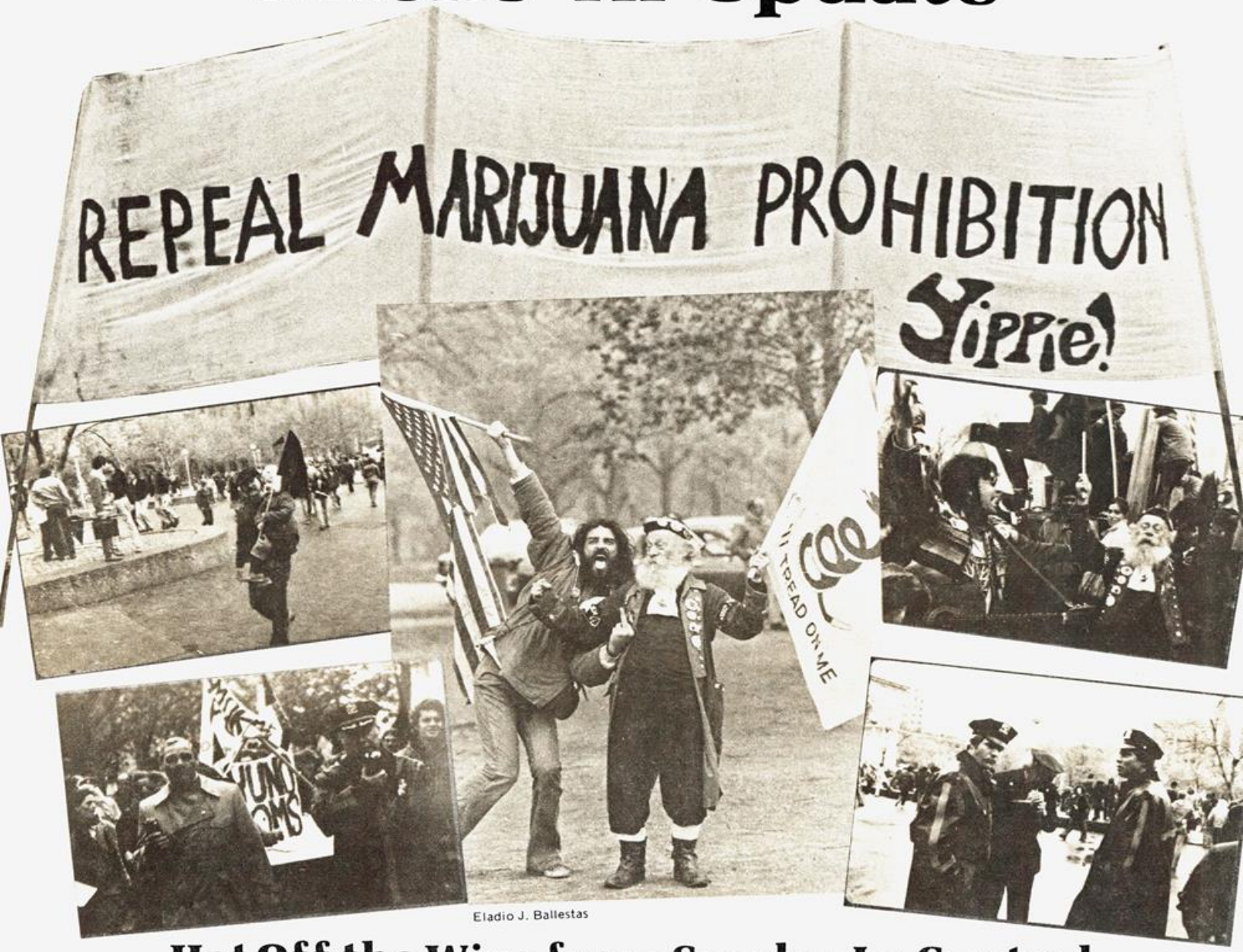
Colombian military and police forces reportedly mounted an intensive search for the gringos using helicopters, shore patrol boats and troops of infantry to scour the countryside. All, fortunately, to no avail.

Although the official DEA estimate of the haul (574 tons) was 100 tons less than the Colombian figure (680 tons), the narcs couldn't resist some outlandish unofficial exaggerations. DEA chief Peter Bensinger boasted that the confiscated Colombian was ten times the largest previous pot seizure but also represented 10 percent of the entire annual U.S. pot supply. However, Bensinger is given to hyperbole: Just a few months ago, the DEA claimed an "all-time-record" bust of 186 tons in the very same area of Colombia, obviously more than one-tenth of 574 tons. And by a conservative interpretation of official U.S. government figures, the amount of pot smoked in the country every year tops 10,000 tons.

INDEX

Smoke-In Update.....28
Nebraska Breaks '78 Decrim Ice. . .29
High Crimes. 30
Coke Confidential . .31
Reefer Reform 32
Georgia Bans Head Shops 33
National Weed. 34
THMQ. 38

Smoke-In Update



Eladio J. Ballestas

Hot Off the Wire from Smoke-In Central

Following three consecutive weekends of police riots at the Ann Arbor, Atlanta and Grand Junction, Colorado, smoke-ins (April 1, 7 and 14), organizers of springtime pot celebrations were braced for confrontation. But in place after place, starting the very next week, the cops' hard line turned decidedly soft:

New York City

Despite police attempts to turn them aside, about 4,000 promarijuana marchers strutted down fashionable Fifth Avenue to Central Park on the 6th of May, puffing pot and emitting wild rebel cries that sent many an elegant window shopper scurrying. It was the 11th Annual New York May Day Smoke-in, sponsored by the Yippies, *High Times* and several other groups, and despite a light drizzle in the early stages, joints stayed well-lit and paraders remained high-spirited all day.

Chanting "Smoke Pot, Not Paraquat," the marchers ignored the police commissioner's plan to swing the march onto a side street to avoid a confrontation with the patriotic Loyalty Day Parade. The Loyalty Day Parade was moved instead. The pot-smoking throng stopped briefly and sat down in front of the office of South African Airlines, releasing a hail of epithets denouncing apartheid policies.

At Central Park, the mass of marijuana celebrants settled in for a long afternoon of rock 'n' roll, speeches and serious toking. It was an ironic contrast to the artificiality of a nostalgia-drenched be-in staged by the movie production of *Hair* at the same site only a week before. As Yippie leader Dana Beal told the crowd, "This should show them that there're still real freaks around."

The smoke-in was the first held under New York's new decrim law, but the participants were as vociferous as ever in demanding a complete end to pot prohibition.

The Associated Press carried the story, noting that this was only a warm-up for the massive trek from hundreds of similar events to Lafayette Park, at Carter's Place, in Washington, D.C., on July 1–4 and to Chicago for reenactment of the Festival of Life, August 26 thru 27.

The release of the new film "Smoke-in," available at a theatre near you if you get it together and call Smoke-in Central or write c/o Box 392, Canal Street Station, New York, New York 10012, is expected to help the cause even more.

Amherst, Massachusetts

In Amherst, where heavy narc intimidation and one actual arrest dispersed last fall's harvest festival, thousands toked up this April 22 to the accompaniment of five bands from New York, Maine and Massachusetts, with spirited raps by Aron Kay and Dana Beal—*and without a single cop visible all day!*

Local Yippie Russ Swann reported that authorities, after first getting heavy, backed off in the middle of the week and offered a deal: no cops if the toking was confined to the U. Mass. campus, two miles from downtown.

The Midwest

This became the pattern in Iowa City—where 500 toked up and protested paraquat while watching a thunderstorm approach—at Hash Wednesday in Champagne-Urbana, Illinois; at both Bloomington smoke-ins (Indiana *and* Illinois); at the Oshkosh, Wisconsin, toke-down, and literally dozens of others where 500 to 1,000 heads turned out to turn on. In one small town after another—at protests challenging local police abuses—fuzz were conspicuous in their absence.

Analysts at Smoke-in Central (212-533-5028) immediately saw that higher authorities, realizing that a few more Atlantas would set off a pro-pot chain reaction in the media, had *overruled* the feds' intent on hardline policies and new hardware, like the mobile booking units used in Ann Arbor for mass arrests without mass jailing.

Cleveland, Ohio

The Kent Memorial Smoke-in at Cleveland, April 30, was going pleasantly but was too uneventful for the organizers, with 1,500 heads gathered on a cold but sunny day next to Lake Erie.

Finally the high command of the gubernatorial campaign of long-time smoke-in organizer Steve Conliff egged the crowd on over to the steps of the nearby city jail, where inmates upstairs chanted along until the TV crews arrived.

Carbondale, Illinois

Smoke-in organizers improved the approach the next day, Cannabis Monday, in Carbondale, Illinois, where 1,000 heads investigating the mysterious total disappearance of law enforcement from their event went downtown, first to the city center, then occupied the adjacent interstate highway for 30 minutes. Only then did police arrive, as heads were already wending their way back to the park—against one-way traffic during rush hour—causing the most monumental traffic jam in Carbondale history.

Dayton, Ohio

But the big news as we go to press is from Dayton, where the Revolutionary Three Stooges Brigade turned out 8,000 strong for a smoke-in and stop-paraquat rally, and police closed the roads, just like the old days at rock concerts.

Dayton is small—about the size of Madison or Ann Arbor. The Mother's Day Smoke-in held on May 14 was rained out, but 1,500 people turned up anyway—much to the consternation of the media and glee of the Yippies, who announced the rain date for the 21st.

The narcs, who first threatened a hard line, soon backed down before the live radio coverage and declared that they'd have to be crazy to bust that many people.

Nor did the roadblocks keep tokers from hundreds of miles away from parking their cars and walking the last miles to converge and welcome pro-pot gubernatorial candidate Steve Conliff, just acquitted by a Columbus jury of assaulting Governor Rhodes with a pie.

Conliff was acclaimed by 8,000 new supporters—as was Gaitwood Galbraith for his farsighted plan to save thousands of midwest farmers thru marijuana revenues.

And in the excitement, the state representative of NORML announced they're introducing a bill for total legalization in the Ohio legislature within 90 days.

It's growing like weeds.

Smoke-In Film Released

A new 28-minute color film entitled "Smoke-in: The Movement to Legalize Marijuana" has finished production in New York and is ready for general release. Critics who saw a private screening of the movie agreed that it was possibly *the* definitive dope documentary.

Directed by New York filmmaker Howard Lotsof, "Smoke-in" is the result of nearly two years of hard work by a dedicated crew of marijuana-movement activists and film professionals. Although the cost was relatively cheap ($70,000) for such an ambitious work, the film easily captures all the glory of ten years of be-ins and smoke-ins, culminating in the 1977 Washington Smoke-in in front of the White House. Some of the most flamboyant personalities in recent American history have cameo appearances in "Smoke-in," including Allen Ginsberg, Jerry Garcia, Timothy Leary, William Kunstler, Keith Stroup and Dana Beal.

Opening with a quick overview of the history of dope repression, narrated by leading dope lawyer David Michaels, the film quickly lands its audience into the acid-soaked environment of the original Golden Gate Park be-ins in San Francisco, the predecessors to the smoke-ins that spread across the country. In winter and in summer, whether it rains or shines, the pot demonstrators march and smoke. What is surprising is the continuity between the struggles of the '60s and the struggles of the late '70s. The film deflates the myth that all important historical movements in the U.S. have floundered or run aground.

"Smoke-in" is available for either 16mm or 35mm bookings from Alexander-Lotsof Productions, 100 St. Marks Avenue, Brooklyn, New York. Telephone: (212) 857-1464.

– Craig Silver

Nebraska Makes "Lucky 11" for Decrim



Senator John De Camp.

Nebraska became the first state to decriminalize pot in 1978. Governor J. Exon signed legislation on April 26 that removed criminal penalties for possession of up to one ounce of marijuana. Nebraska is the 11th state in the union to approve decriminalization.

Under the new law, which took effect on July 1, 1978, possession of one ounce or less of pot is a civil infraction that carries a mandatory $100 fine for a first offense, with no threat of a jail sentence or criminal record. However, judges have the option to send a violator to a drug-education program. A second such minor offense calls for a mandatory $200 fine and up to five days in jail, while a third infraction will result in a $300 fine and a jail sentence of up to seven days.

For amounts over one ounce, provisions of Nebraska's old law, itself one of the more progressive in the nation, remain applicable: Possession of up to a pound of marijuana is a criminal offense, punishable by a seven-day jail sentence and a fine of up to $500. Possession of more than a pound of pot calls for the offender to be sentenced to up to one year in prison and fined $500.

The modified decriminalization legislation (L.B. 808) was the result of a compromise struck between State Senator John De Camp (Neligh), who sponsored a more progressive decrim bill, and Patrick Venditte (Omaha), who had sought to stiffen penalties. The final vote in Nebraska's unique unicameral legislature was a landslide 36-9, with four abstentions. The overwhelming pro-decrim vote has a rural explanation. Acres of wild marijuana have grown throughout the state for decades, and pot has generally been less menacing and unfamiliar to Nebraska's largely agricultural population.

Since 1973, Oregon, Alaska, Maine, Colorado, California, Ohio, Minnesota, Mississippi, New York and North Carolina have passed marijuana-reform legislation.

Leading Colombian Joins Legal Pot Group

BOGOTA—One of Colombia's leading citizens, the eminent historian Eduardo Lemaitre, has joined the growing marijuana legalization lobby here. Lemaitre made a public plea for candidates in the recent presidential elections to discuss the issue and admits to having grown marijuana in a pot on his balcony.

"Compared to the vice of alcohol," said Lemaitre, "and the damages of every kind that it causes, marijuana is like a children's game." Lemaitre said that marijuana caused far less harm than alcohol, tobacco or gambling, that it is financially and physically impossible to prevent it from being grown and that legalization would wipe out the bandit gangs terrorizing the north coast and provide useful income to the state.

Marijuana was already an issue in last February's parliamentary elections with the bishop of Santa Marta instructing his flock not to vote for candidates connected with marijuana smuggling, suggesting that many of the candidates included marijuana exporters.

Holland Wants Out of Anti-Pot Pact

A representative of the Dutch government has petitioned the United Nations to amend the 1961 International Convention on Narcotic Drugs to permit each country to make its own rules concerning domestic consumption of marijuana. The U.N. pact, also known as the Single Convention, currently requires all signers to prohibit possession and use of cannabis.

Delegate E.J.N. Brouwers of the Netherlands told the U.N. Economic and Social Council that his government wants the pact changed so that the Dutch can keep and use pot freely, but it is still agreeable to Convention provisions that ban the export of marijuana and its derivatives.

Mystery Pot Plane Two-Time Loser

An old Convair 240 once grounded for being suspected of hauling pot has mysteriously turned up at a small Georgia airport filled with ten tons of marijuana. Authorities say the plane was seized the first time a year ago when it landed at another nearby airport. The crew explained to airport personnel that they needed to make repairs and buy parts in town. When they didn't return, the plane was examined and found to have traces of marijuana. Cops seized the plane as a suspected carrier.

After holding it for a year, they auctioned it off to Custom Air Limited, Inc., of Fort Lauderdale. They, in turn, sold it to some people in Dotha, Alabama. "The businessman was going to outfit it for hauling cattle. In fact, he even bought some cattle pens from me," said the former owner.

And then the plane turned up at Thomson-McDuffie Airport filled with the ten tons of pot. The plane was apparently flown in between 2:00 and 3:00 A.M. when the airport was closed. Whoever landed it then stole a smaller airplane and disappeared. When cops looked inside the Convair, they found the weed. There was no explanation why the weed was not retrieved.



Jerry Welch

Twice-busted Convair 240; first with only traces of dope, now with ten tons.

● Demon fliers made a near-impossible emergency night landing in a street in **Valledupar, Colombia,** at the southern tip of the Guajira Golden Triangle. Police later claimed to have found **cocaine and marijuana seeds weighing 20 kilos,** plus a G3 automatic rifle with 150 rounds and a sawed-off Marlin 12-gauge shotgun.



Jerry Welch

Numbered bales of pot being hauled away.

The plane, a Piper Cherokee 180, had flap and prop damage but made an almost perfect landing in the "Doce de Octubre" district. Two occupants were seen to climb calmly out with a case and a gun and stroll off into the dark.

● A midnight narc stakeout allowed **grass**-runners to unload **600 burlap bags** of Colombian from a white cabin cruiser onto an isolated dock near Boothbay Harbor, Maine, before pouncing on it. Federal, state and local cops impounded the 81-foot British-registered *Onalay* with 20 tons, and took 21 men, mostly New Yorkers, to the Wiscasset County Jail.

● When the Coast Guard boarded the 73-foot *Miss Port Canaveral* in Tampa Bay they found her chock full of **grass** bales in burlap, plus 20 tons rolling loose in the hold: **60 tons** altogether, though a good deal had already been unloaded before the capture. The shrimper and her crew of 16, largely Cuban, had been drifting all day three miles south of MacDill Air Force Base. Insiders believe this bust developed out of the recent seizure of 70 tons of Colombian in a quonset warehouse north of Tallahassee by the Big Bend Drug Task Force.

● The *High Times* Most Daring Score of the Month Award goes to car thieves who ripped off a Jeep parked outside the **Colombian Forensic Medicine Institute** here. The four-wheeler was packed with samples for analysis of confiscated **coke and grass** from all over Colombia. Red-faced local cops suspect the hot-wiring artists knew exactly what they were getting and will be sitting back with a huge stash of marijuana and hashish plus several ounces of high-grade toot.

● A master **LSD** chemist in **Bristol, England** has testified at his trial that he "wasn't in it to make a fortune, but to get a lot of people high." Richard Kemp, described as a brilliant young English chemist who became one of the world's top LSD manufacturers, was busted last spring in a remote eighteenth-century mansion in Wales. Kemp said he had taken LSD 50 times and that the only side effects were premature baldness and graying.

ROLLING pouch T.M.

Send $1.00 for 3 pks. Pouch Paper™ to cover postage and handling to:
Bi-Rite Ents.,
3014 S. Archer Ave. Chicago, Il. 60608.

name _____
address _____
state _____ zip _____
I certify I am over 21 years old. Allow 3 weeks delivery.

Grass By Mail?

Not from us. Not *yet*. But for everything else you need *now*, send for our FREE, illustrated, direct mail, consumer catalog. Choose from the widest, wildest collection of *pipes, bongs, smoke savers, papers, clips, carburetors, rollers, scales, carrying and storing stashers, head literature*—to nothing-left-out!

Use your free copy for one-stop-shopping-by-mail ... with the convenience and privacy of mail delivery included in Mellow Mail's moderate prices *(never an extra charge!)*

Put together by us, this handsome catalog of top-quality smoking paraphernalia is ours alone. And *yours* for the asking. Please include your Zip Code.

Send for your FREE CATALOG today!

MELLOW MAIL/P.O. Box S-1/New York/NY/10011

Feds Claim Billion-Dollar Blow Bust

New York feds are claiming to have busted an ingenious billion-dollar coke pipeline with the indictment of 61 people on raps ranging from importation to laundering funds. According to the indictments, more than 1,000 pounds of top-quality blow have worked their way from Bolivia, through Colombian kitchens and on to the Big Apple streets.

The DEA task force that investigated the case says the blow was smuggled north on Grancolombiana Line ships and was thrown overboard in New York harbor, where divers retrieved it. The majority of the 61 indicted were Colombians. The "billion-dollar bust" was preceded earlier in the month by the indictment of eight New York City cops on charges of dealing coke they ripped off from dealers.

● Last year at this time the Colombian authorities were saying marijuana was topping coffee sales. Colombian law-enforcement officials now say that **cocaine** also rivals coffee as **Colombia's** main export. They quoted economists who blame last year's record 29-percent inflation in Colombia on an influx of cocaine money and a new dope middle class in Colombia.

● Two Italo-Americans have been arrested in **Quito, Ecuador,** for alleged cocaine possession. Ecuadorean narcs claim they found over **1½ kilos of coke** on the two men as they boarded a plane in Peru en route to the U. S.

● A New Mexico man is being held by federal agents because he offered to buy a limousine for cash. Rather than call police after bumping into the limo with his own vehicle near the **New Orleans International Airport,** the 28-year-old man tried to buy away the damage. When the police arrived they found over $113,000 stuffed into his pockets, boots and underwear along with a ball-point pen that had **cocaine** where the ink should have been.

● Two hapless **Lincoln, Nebraska,** men are in the pokey after a mix-up in baggage handling led to their arrest. The two had arrived by plane from Denver, but, in the great tradition of flying, their baggage was nowhere to be seen. The suitcases were rushed to Lincoln on the next flight, where an airline employee dropped one of the suitcases and it burst open to reveal **11 pounds of pot** and **120 "small bags" of coke.** The baggage handler tipped fuzz and the men were nabbed.

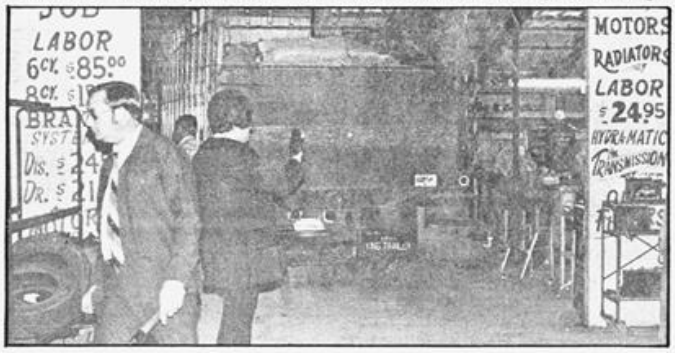
● New York Representative Lester Wolff, a right-wing fathead who frequently takes winter junkets to South America for the ostensible purpose of investigating the dope traffic, is charging that Fidel Castro aided the establishment of a **Miami-area** banking firm to launder **coke** money. Wolff, who claims his information comes from government agencies, says Castro promoted "WFC," a Coral Gables concern, by pumping money into it through Cuban-Americans. According to Wolff, dope millions from Castro's own coke business would be laundered at the bank. The major flaw in Wolff's story is that the WFC is run by Guillermo Hernandez-Cartaya, a Cuban exiled by Castro who is prominent in the anti-Castro Cuban community in the U. S.

● A 30-year-old Canadian woman stands charged of smuggling **six pounds of coke** into the **Montreal Airport** from Barranquilla, Colombia. Customs found the toot in a fake bottom in her suitcase.

● Keith Richard's **coke** ordeal drags on. Richard has chosen trial by judge and jury and is currently free in **France** on $25,000 bail.



Grancolombiana Line's Ciudad de Cuenca *docked at the Brooklyn pier that handled what cops call over 1,000 pounds of coke.*



Red Oak, Texas, deputies hunt for more stash after finding 4,500 pounds of pot in garage.

Waxahachie Light

Hit Parade

A lot of smugglers wish they'd pass the Coast Guard like ships in the night, but that hasn't been the case lately. As busts around the country indicate, this year's harvest is having a tough time making it to market, but it's getting there. This month's falls are:

● **20 tons,** Back Creek, N. C., barge and tug, 13 arrests.

● **20 tons,** Yankeetown, Fla., yacht *Our Time,* 10 arrests.

● **18 tons,** Midway, Ga., 50-ft. shrimp boat *Miss Carol J.,* 7 arrests.

● **18 tons,** Navarre Beach, Fla., freighter *Navigator,* 4 arrests.

● **13 tons,** Thomson, Ga., abandoned DC-7, no arrests.

● **13 tons,** Chrystal River, Fla., yacht *Our Seas,* 6 arrests.

● **10 tons,** 51-ft. sailboat, freighter *Sea Nymph,* 68-ft. shrimper, 9 arrests.

● **8 tons,** Ft. Pierce, Fla., 50-ft. fishing boat, 8 arrests.

● **5 tons,** Miami, Fla., 75-ft. freighter *Carolina,* 10 held.

● **3 tons,** Lauderhill, Fla., apt., 1 arrest.

● **5,600 lbs,** Fort Lauderdale, Fla., yacht *Frances T,* no arrests.

● **4,500 lbs,** Red Oak, Tex., garage, 7 arrests.

● **4,200 lb,** Daytona Beach, Fla., 2 powerboats, 1 arrest.

● **4,000 lbs,** Pompano Beach, Fla., 36-ft. *Pacemaker,* 2 arrests.

● **3,390 lbs,** McMahan, Tex., farmhouse, 2 arrests.

● **3,300 lbs,** Troy, Mich., home, 3 arrests.

● **2,300 lbs,** New Orleans, La., safe house, no arrests.

● **2,000 lbs,** Meckleberg County Airport, Ga., Lockheed Lodestar, 1 arrest.

LOOKING FOR COCAINE?
PARAPHERNALIA

COCACCESSORIES™: that's about all we sell. Not only do we carry a large selection of solid 14K gold bottles, spoons, straws, and razors, but we also feature a complete line of non-gold coca paraphernalia: from glass cutting surfaces to strainers to stashes to books to scales to pestles and spatulas... in short, all the tools of the trade. Whether you do a gram a month or an ounce or more... if you don't know about us by now, you should.

A color catalogue of our complete line is available for $2.00. Write to:

BROTHER BOB PRODUCTIONS
POST OFFICE BOX 1868 HOLLYWOOD, CA 90068

BROTHER BOB PRODUCTIONS
SOLID GOLD
COCACCESSORIES

GIVE BLOOD
Red Cross The Good Neighbor.

Louisiana Moves Toward Decrim

• A Louisiana senate committee recently adopted a proposal that would eliminate jail terms for first-time offenders charged with possession of one ounce or less of marijuana.

The senate committee concluded after two days of testimony that the Louisiana legislature should lower pot possession penalties "in light of current medical evidence, the ineffective deterrent effects of the law and the cost of enforcement." However, the panel's recommendations fall short of actual decriminalization, as violations of the possession law would still be considered criminal misdemeanors. Under current Louisiana law, first offenders convicted of possessing small amounts of pot can be sentenced up to six months in jail.

Following a lengthy court hearing, Judge Joseph Durant concluded that there is no "rational basis" for outlawing the possession of pot in the privacy of one's own home. Judge Durant added, "The overwhelming evidence established that marijuana, as it is presently used by approximately 20 to 30 million Americans, does not constitute a health problem of any significant dimension."

• A last-minute passionate speech by a lawmaker who claims that marijuana turned his son into a thief apparently convinced the Vermont senate to vote down a recent marijuana decriminalization bill that had been considered assured of passage.

Following an overwhelming 90-53 victory in the state legislature, the senate appeared set to add its approval until Senator Chester Scott, a Republican of Windsor County, rose to tell the seamy tale of his son's ruination at the hands of marijuana. Starting with a joint in his freshman year at high school, the junior Scott ended up at a Halfway House for addicts in New Hampshire where, according to his father, "every one of them started with a reefer—some of them were mindless."

• Convicted of growing marijuana plants at his home, 24-year-old bus driver John Mills of Puyallup, Washington, was sentenced to cart an earth-filled wheelbarrow around the Mason County Courthouse for three Sundays in a row. He was also required to carry a sign calling for the decriminalization of grass and to compose an essay "on the pros and cons of legalization of marijuana." Said convicting Judge Frank Baker: "A little humility never hurt anyone."

• Six years after the Le Dain Commission made headlines with their recommendation that the Canadian government relax its marijuana laws, lawyers in British Colombia have voted decisively in favor of a measure calling for the decriminalization of pot.

A six-page resolution urging that cannabis be removed from the Narcotics Control Act and placed under the Food and Drug Act was approved recently by the provincial council of the B.C. Branch of the Canadian Bar Association, the central body of the 4,000-member law fraternity. Only 5 of the 50 lawyers on the council voted against the resolution.

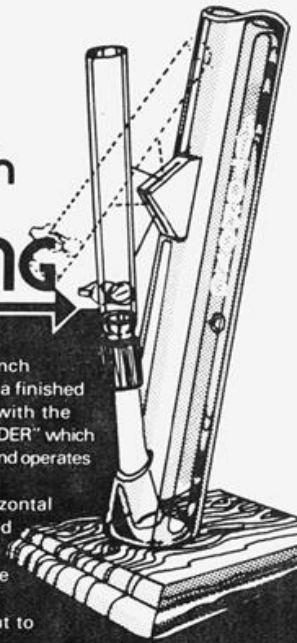
• Stating that "marijuana use is far more innocuous in terms of physiological and social damage than alcohol or tobacco," a Florida circuit court judge ruled that state's antimarijuana law unconstitutional.



John Farrell

In Vermont, this driver might well wind up in the joint, stamping funny personalized plates like this.

load
50 hits
and party with
the new
AUTOBONG



The AUTOBONG is a 12-inch slant type acrylic bong with a finished wood base and equipped with the convenient new "AUTO-LOADER" which holds approximately 50 hits and operates as follows:

- Make sure valve is horizontal
- Fill loader with preferred substance
- Turn valve one complete turn for one perfect hit
- Swing loader up and out to light position

Specialty Products
112 I Frederick Ave.
Rockville, Md. 20850

Ship to
Address
City, State
Zip

Please rush me _____ AUTOBONGS @ $22.50 ea.
Add $1.50 each postage and handling. **sorry no c.o.d.s**
Retailer and distributor inquiries on letterhead for hit man catalog.

Baby Toker Shirts



Willie Mo, the baby toker, says everybody needs a grass shirt.

Country Toad has shirts for your baby toker. First quality, 100% cotton shirts are available silk-screened with a grass leaf or the original Harley emblem.

Style 101: black T-shirt w/orange and white Harley emblem. Sizes: 2 yrs., 4 yrs., 6 yrs.
Style 201: Black tank top w/orange and white Harley emblem. Sizes: 2 yrs., 3 yrs., 4 yrs.
Style 301: White T-shirt w/green grass leaf. Sizes: 2 yrs., 4 yrs., 6 yrs.
Style 401: White tank top w/green grass leaf. Sizes: 2 yrs., 3 yrs., 4 yrs.

Send style number, size, and $4.50 for each shirt plus $.50 postage and handling to:

country toad

P.O. Box 5328
Greensboro, N.C. 27403
Allow 4 to 6 weeks delivery



EARTH ENERGY
PURE EARTHWORM CASTINGS

HOME GROWERS
FOR A BUMPER WINTER CROP OF EXOTIC PLANTS AND HERBS GROW YOUR OWN NATURALLY WITH 'NORTHWEST EARTH ENERGY' 100% ORGANIC PLANT FOOD PH ± 7.0 EXCELLENT SOIL AERATOR MAXIMUM YIELDS MINIMUM HASSLE NO CHEMICALS TO MIX OR ADD. MIX WITH TOP SOIL AND PLANT

SYSTEM #1

1 Q	1 GAL	5 GAL.
1.98	4.98	19.98

SYSTEM #2
SELF PERPETUATION DOUBLE PLANT TREATMENT

1 Q	1 GAL.	5 GAL.
100 RW* 3.98	500 RW 9.98	1000 RW 29.95

* RED WIGGLERS
SEND CHECK OR MONEY ORDER TO

NORTHWEST EARTH ENERGY BOX 7705 OLYMPIA WA. 98507

Georgia Bans Head Gear
Carter's Home State Outlaws Dope Press

by Mark Thellman

ATLANTA—The Georgia headshop industry was thrown into crisis on April 11 when Governor George Busbee signed three bills making it illegal to sell drug-related printed material and paraphernalia.

Two of the bills issued by the Georgia senate and sponsored by senators Lawrence Stumbaugh and Roy Barnes now make it illegal to sell or display drug-related paraphernalia and literature (e.g. *High Times* magazine) to anyone under the age of 18.

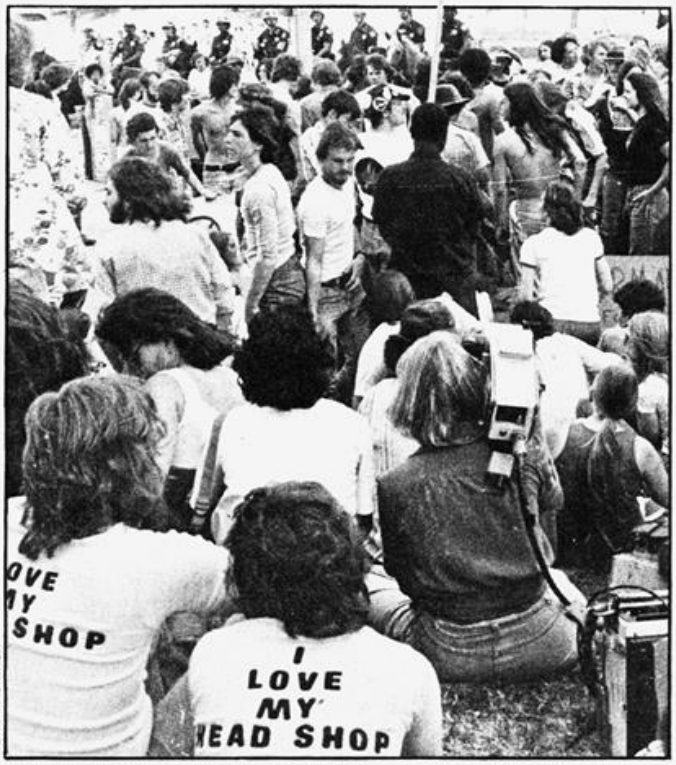
The third bill, drafted by a long list of state representatives, makes it a misdemeanor "to sell, exchange, offer to sell or exchange any object for injecting, inhaling, or smoking a narcotic drug or marijuana unless the buyer is authorized by law to have under his control such narcotic drug or marijuana."

Hours after the bills were ratified by the governor, ten headshops and one paraphernalia-item wholesaler brought suit against the Georgia state government contesting the constitutionality of the new laws, especially a possible First Amendment violation regarding the restriction of drug-related literature to minors, and the laws' general vagueness.

Two consumers, John B. McLaughlin and Steve Swimmer, also joined the suit, stating they wanted the freedom to choose for themselves whether to buy items offered by the plaintiffs' businesses.

Defense attorney Reber Boult, filed an injunction to keep the headshops open and selling the merchandise in question until the suit is heard.

Federal District Judge Richard Freeman listened to the injunction plea the following day and ruled that the state should be given first chance to construe a verdict. Therefore he abstained from the injunction ruling but stated that the drug-literature law may very well infringe on First Amendment rights and that he would study this possibility further.



Mark Thellman

Loving your banned headshop may not be enough to bring it back due to Georgia's new laws against drug-related paraphernalia and literature. The headshop lovers are making their T-shirt statement at a smoke-in held in Atlanta in April.

Many of the headshop owners panicked, converting their stores into record shops, covering their display cases and selling nondrug-related items, or removing all items that could be questioned under the new laws.

Windfaire Smoking Paraphernalia, a shop owned and operated by Dan Lackey and Wayne Houseworth, followed the last course. Any item mentioning or depicting grass or cocaine in advertising or instructions was taken from the shelves. Even so, three employees quit the store rather than risk arrest.

On top of this, Windfaire and other Dekalb County headshops were told their business licenses would not be renewed in 1978 by Dekalb County Finance Director Patrick Glisson because the Dekalb County Commission found them to be "conducting business in such a way as to be a hazard to health, safety, welfare and morality of the citizens of Dekalb County."

The shops appealed this decision and have been operating under a stay of execution. A ruling is expected soon.

The headshops now plan to seek an injunction against the new paraphernalia laws from the Fifth Circuit Court of Appeals in New Orleans, the same court that may hand down the business-license decision.

Mail Order LSD a Poorly Kept Secret

by Seth Flagsberg

LSD, 100-percent pure, is available through the mails. The source is Supelco, a government-approved chromatography supply company that manufactures and retails various drugs for use as standards (references) in chromatography analysis (breaking down solutions of closely related compounds).

For $20 Supelco will send you 2 milligrams of LSD-4195, pure LSD bitartrate. The 2 milligrams of bitartrate equal 1,400 micrograms of LSD, approximately four very healthy sized hits. (The unit cost is $10 per milligram for orders larger than 2 milligrams.)

Supelco does not require that their customers have a Drug Enforcement Agency (DEA) license to buy from them. The acid comes in methanol (wood alcohol), a toxic solvent. Using a double boiler setup and near-boiling water, the methanol can be totally evaporated. Once the methanol is gone, only pure LSD remains.

Other companies have offered drug mixtures without requiring DEA licenses, but these compounds have all been in very low doses and it seems that only Supelco offers acid. Though no license is required, Supelco's policy is to accept only "written purchase orders from recognized laboratories." Informed sources say this safeguard is often circumvented, since anything from a photo-developing store to a printer legally passes as a "recognized" lab.

Supelco is located at Supelco Park, Bellefonte, Pennsylvania 16823.



NEED NEW ID?

CHANGE NAME/AGE with:
FULL-COLOR PHOTO ID CARDS
and BIRTH CERTIFICATES
Get *"inside"* information on:
DRIVERS LICENSES • U.S. PASSPORTS
and other GOVERNMENT-ISSUED ID!!
Details/Samples 25¢

NAME _____

ADDRESS _____

CITY _____ STATE ___ ZIP _____

EDEN PRESS • Box 8410-HT • Fountain Valley, CA 92708

GIVE BLOOD

Red Cross ✚ The Good Neighbor.

Dope Games Draw 10,000 to Madison Bash

The barker's voice drifted lazily through the warm May air. "Step right up now and try the ring toss, only 25 cents, ladies and gentlemen." A slender young man clad in nothing but a pair of jeans sauntered up to the barker. Exchanging a quarter for three rings the young man slowly and deliberately hitched up his pants and drew in a deep breath. They he deftly tossed each one of the rings neatly around the pole that sat on the ground six feet in front of him. This was no ordinary carnival though. The prize was a big fat joint.



Howard Berman

Madison's equivalent of an all-American Fireman's Field Day: lots of food, booze, games, parades, pretty girls and zip-lock bags full of sweet all-American fume.

This wonderful scene was repeated over and over again at the Mifflin Street Block Party in Madison, Wisconsin. Ever since 1969, when the first block party was held in the midst of the revolution, pot and politics have mixed hand in hand on Mifflin Street. The poster that announced that first party f'ttingly carried the character of the Zig-Zag man on its face. The get-together that resulted turned into a wild three-day melee with police in which residents of the Mifflin area were forced to live under a state of veritable siege. Though many now claim the block party has lost sight of its political past, it certainly hasn't forgotten about the importance of dope to the spirit of the festival.

Over the past few years "dope games" have become a tradition and the darling of the 10,000 people who party on Mifflin Street every year, come rain or shine.

Equally popular are the dope contests. Ever try to guess the number of seeds in a small zip-lock bag half full of the little devils? Easy it isn't, like attempting to count the grains of sand on the beach. At the block party the four guessers who came closest walked away with a free lid of delectable dope and a great story to tell their toking partners.

What does the future hold for dope games and the Mifflin Street Block Party? Party organizer Mike Fellner says there are no limits on people's imaginations. "This year's plans call for a small gambling area where craps and roulette will be featured. The block party will act as the house and all chips will be redeemable only for joints. In addition, there will be our usual favorites." There are some games where no one comes out a loser.

Ready for Harvest?
Not without these two books.



The New MARIJUANA GROWER'S GUIDE

by Mel Frank & Ed Rosenthal

Marijuana Grower's Guide is the most advanced, most complete guide to growing in the cannabi-culture field today. It may never be outdone. Sections on indoor and outdoor cultivation, breeding, grafting, sinsemilla, drying, curing, and *Cannabis* botany and chemistry will help you grow crop after crop of primo pot. Discloses secrets of master grass farmers. Detailed instructions for supplying a constant flow of superior quality smoke. $8.95



SINSEMILLA: Marijuana Flowers

by J. Richardson & A. Woods

Sinsemilla is a full-color photographic study of the changing rhythms of sinsemilla—the seedless female *Cannabis* plant—from germination of the seed to the ripening of the unpollinated flower tops of the finest smoking dope you can get. $9.95

California residents please add 6% sales tax. Add 70¢ postage & handling for one book. **SAVE:** Order two books and we pay postage and handling.

Mail to: Quick Trading Company, Dept. HT36, P.O. Box 477, San Francisco, CA 94101.

Sci-Fi Fashion Queen Lives Fantasies

by Keith Deutsch

She burst upon the scene in 1973, a perfect incarnation of the queen of adult comics, Vampirella. Her fans and the convention people who make up the hundreds of thousands of fantastic fanatics in the science fiction and comics world will always remember her in her first costume. Vampirella lives!

"I try to do something different every time I do a costume," says Angelique Trouvere, reigning queen of comic-arts costumery. "I don't like to repeat myself. I really do look like Vampirella, and my costume was very accurate for that first convention, Phil Seuling's Comic Art Convention in 1973. So I really made an impression as that character. But I've done 25 or 26 other great costumes too. I save them all."

Costume competition at conventions started at science-fiction conventions in the '30s. "Of course everything wasn't as formal then as now," says Angelique, "but it started with the World Con, the most important science-fiction convention. And the World Con is still the most prestigious to win."

There are basically three kinds of conventions where folks get together to compete in costumes: science-fiction conventions, comics conventions and "Star Trek" conventions.

"The idea," she explains, "is to capture a character that has a recognizable 'shtick'. You have to be able to recognize the person you're doing by the clothing and makeup."

It appears that comic fashions are here to stay. Says Angelique, "My friend, Animal, another costume competitor, just opened her own store of fantasy fashions called the Asphalt Jungle in New York. And I'm designing for movies and plays. Maybe I'll do something in leather, you know? Something punk. I like to become some other character. To be outrageous. It is much more than fashion. It's fantasy."



Frank Thorne

Angelique (left) *poses as Marvel Comics' "Red Sonja" next to the mystery model for the Lampoon's "Danger Rangerette."*

Rat Exposed in Big Top Pot Heist

by Alison Oldham

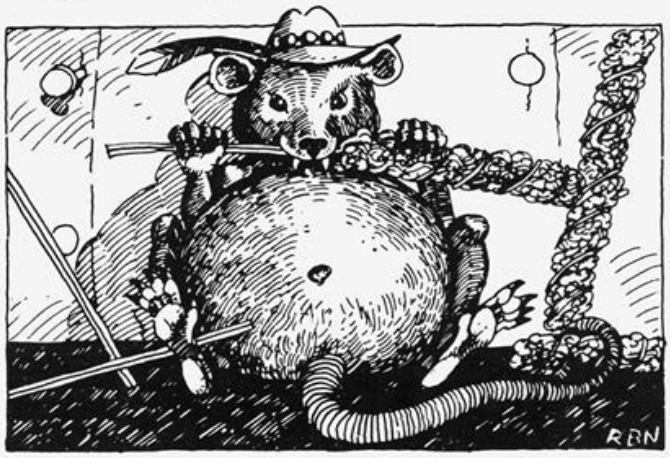
One of California's most notorious marijuana-eating mice has been implicated in a pot hijacking from San Francisco's Hall of Justice.

Last year police in San Jose claimed a rat they nicknamed Marty was to blame for dope disappearing from the narcotics department. Marty was thought to have gone underground after his successful exploits there.

However, in February Marty was discussed in a San Francisco City Hall courtroom as the possible brains behind another pot heist. When evidence against six people accused of running a marijuana supermarket was produced in Judge Roy L. Wonder's courtroom recently, some was missing; the state fingered mice as the culprits.

Police had sealed small amounts of suspect substances in exhibit envelopes and larger quantities in plastic bags after raiding the Big Top Pot Supermarket on Castro Street last July. They claimed they seized more than 100 pounds of Colombian pot, 3 pounds of Thai sticks and 3 pounds of hash.

The evidence has been wheeled into court daily in the past weeks aboard Safeway-style shopping carts. The narcs complain about "rotting mushrooms," but the six Big Top defendants are more concerned about missing evidence. They intend to turn their trial into a landmark case to legalize marijuana. If they succeed, they hope to reclaim the Big Top stock. But they have written off the five Thai sticks that were once stored in an envelope inside the black plastic garbage bag containing various grades of Colombian, some loose and some in zip-locked baggies.



Bob Neubecker

Quizzed about the empty envelope, the narc then testifying fingered Hall of Justice mice. He had been told by a police chemist that the five-inch-long Thai sticks, weighing approximately 4 grams each, had been removed intact through a small gnawed hole.

Judge Roy Wonder was impressed by the intrepid mouse burglar, who apparently got clean away with pot worth $200 on the streets.

However, experiments at the Big Top indicated that mice eat only the insides of seeds and that only a rat would be capable of carrying the weighty bamboo centers of Thai sticks. Judge Wonder had focused upon an important point in the Big Top case when he linked Marty to the Hall of Justice hijacking.

The narcs were held over for weeks in a preliminary hearing originally scheduled to last one week. If they let more high comedy creep into their testimony, perhaps the high crimes they allege will be dismissed.



Rizla's seven-foot-long "living cigarette" cases the joint at the National Association of Tobacco Distributors in Miami, while Debbie Ogonosky looks for a big roach clip.

STASH SAVER

Ω



for "Stashin' in Fashion"

Keep your gold in a perfect place. Snuffs in seconds, transparent, crush resistant with snap cap. Sterile and individually wrapped.

6 PAK - $2.00 PLUS 25¢ POSTAGE AND HANDLING

OMEGA MARKETING

POST OFFICE BOX 240 • JACKSONVILLE, FLORIDA 32201

Get Creamed for only $26.

What a gas! The fabulous Whip Cream Wizard®, with 10, safe, FDA-approved nitrous oxide chargers for only $26. Additional chargers $4.50 / box of 10—add 50¢ postage per box. Send to "The Wizard," Box 1098 (HT), Newark, NJ 07101.
The Whip Cream Wizard.
How sweet it is!



Minimum Order: 2 Boxes

CLASSIFIED

Rates: $4.00/word; min. 10 words. POB nos. - 2 words each, abbreviations, ZIP codes - 1 word each. Classified display is available at $125/column inch (column width is 1 5/8"). All ads must be typewritten for legibility. Check/M.O. must accompany copy. Ads will appear 60 to 90 days after receipt. All classified ads are accepted at the discretion of the publisher. High Times, The HT Classified, P.O. Box 386, Cooper Station, New York, N.Y. 10003.

PARAPHERNALIA GIFTS

INCENSE: 100 STICKS $1, PRE-assorted, pre-paid and guaranteed. FEDERATION, Box 2074, Pittsburgh, Pa. 15230.

ACRYLIC BONG CLEANER $3.50. TED'S HERBS, P.O. Box 6684, Philadelphia, Pa. 19149.

HAWAIIAN HI PRESENTS JOINT in the Morning and the Day Is Your Friend, also in Hawn; and Joint on the John and Your Worries Are Gone®. Hand airbrushed/screened, blue, yellow, white (give 2 choices), S,M,L,XL Tees or unisex $8.95, one-size ladies tank $7.95, plus $1 handling; money order or cash to 2465 St. Louis Drive, Honolulu, Hawaii 96816.

SMOKE THE NATURAL WAY—unique handmade Birchwood compact pipe that transforms from 1x1.25-inch dowel for convenient carry. $3/ea., 2/$5, screen included. TJM, POB 31, New Hyde Park, N.Y. 11040.

SAVE DOPE! WITH JOINT wires, just roll into joint. Makes its own roach clip. Reusable. 20 for $2. PME, Box 1402, Evanston, Ill. 60204.

GIFTS GALORE! MARY-GIN brings you our beautiful new 40-page catalog of smoking essentials at the best prices around. Unusual gifts for every occasion. Please send $1, refundable on first order to: MARYGIN, INC., P.O. Box 5827, Tucson, Ariz. 85703. (602) 623-0709. Store and distributor inquiries welcome.

NO_2 BALOON BLOWING KIT. Get that party off the ground. $8.50 ppd. From FJM INC., P.O.B. 16192, Clayton, Mo. 63105.

SHO*YO*JOYNT PENDANT. From FJM Inc. Display your favorite. $7.50 ppd. P.O.B. 16192, Clayton, Mo. 63105.

PIPE AND BONG PARTS. Brass, aluminum, wood, plastic. Large variety at very low prices. Minimum orders of 1,000 per piece. Call for free catalog and information. Phone: 800-523-8163 Ext. 149. BONG WORX, Elverson, Pa. 19520.

HAWAIIAN ROACH CLIPS: Beautiful shell or coral clips $3.50. Specify coral/shell. Distributor inquiries welcome. HAWAIIAN HIGH, P.O. Box 17675, Honolulu, Hawaii 96817.

DISPOSABLE PIPES. EXCELlent smoking pipe is made for years of service but is crushable to eliminate recognizable evidence. Great for concerts, traveling. Satisfaction guaranteed. Send $2/1, $4/3, $7/6. EARTH PIPES, P.O. Box G, Dept H-1, Clarence, N.Y. 14031.

PAYING $8 EACH FOR 10-K class rings, any condition. Ship for prompt payment. T. HARRIS, Box 1491, Burlington, N.C. 27215.

GANGA-T-SHIRT LEAF DESIGN printed white on black. Colombian, Mexican, Thai, or Hawaiian. Send $5.95 plus 50¢ handling and details to: D. WICKS, RD #2, DuBois, Pa. 15801.

HERBS & HIGHS

JOIN US IN CONSCIOUSNESS. Discover new principles to attain and prolong the alkaloid high—forever! Score revealing booklet—$5, prisoners $3. R.I.S.E., P.O. 1986, Lihue, Kauai, Hawaii 96766.

LUDES BY MAIL! FOLLOW OUR copyrighted synthesis to yield pure Methqualone (714s) in your basement. $10 (no checks) to: UNITED NEWS SERVICE, P.O. Box 333, Brooklyn, N.Y. 11235. Add $5 for speed synthesis.

SPEED MADE EASY. TRIED and true, homemade method—$3. All about coke, including practical synthesis—$6. HITS, Box 261, 310 Franklin Street, Boston, Mass. 02110.

CANNED PSILOCYBIN mushrooms! Invented recipe in home kitchen, tested many times. Psilocybin great after 2 years. Will send information for canning, drying, preparing, freezing, and cooking mushrooms for parties. No refrigeration needed to transport mushrooms. Make a profit, don't let your mushrooms rot! $3. B. SMITH, P.O. Box 40096, St. Petersburg, Fla. 33743.

TIRED? WORN-OUT? GET Quick Pep Tablets. Scientific combination of ingredients goes to work fast. 32 tablets/$4.25. MCDONOUGH, P.O. Box 2030A, Las Vegas, Nev. 89101. Cash or money orders instant service.

PILL MACHINE. MAKE YOUR own pills. No questions asked. Call (714) 239-0207 or write PHARM MACHINERY, 622 12th Ave., Box #1, San Diego, Ca. 92101.

PSYCHEDELIC SOURCES. Where to buy LSD, woodrose, cocaine, yohimbe, 65 others. $5. FRED, Postbox 22604, San Diego, Ca. 92122.

HEALTHY HAWAIIAN VACAtions: Consciousness Trainings this summer on Maui! Free brochure: H H 2, Box AA, Honolulu, Hawaii 96822.

DRINK-A-JOINT. YOU SUPPLY the herb and freezer, we supply a special cannabis cocktail glass, dispenser and instructions on how to freeze your smoke and drink-a-joint. Send $5.95 check or money order to: HILL & DEITRICK, P.O. Box 1921, San Leandro, Ca. 94577.

LEGALIZED MARIJUANA seeds. Worth weight in Colombian gold. 1 pound $15 cash. P.O. Box 205, Newton, Pa. 18940.

PROFESSIONAL SERVICES

ATTORNEY, L. ROB WERNER, 6255 Sunset Blvd. #2000, Los Angeles, Ca. (213) 469-7047. Criminal Law and Appeals.

PARAMEDIC AVAILABLE FOR expedition, tour group, etc. For information contact: P.O. Box 27412, Tucson, Ariz. 85726.

MISCELLANEOUS

PRESS I.D.-V.I.P. TREATMENT as freelance writer photographer. Free details City Agency, P.O. Box 1452, Orange, Ca. 92668.

IDENTIFICATION CARD CATAlog. Send stamped addressed envelope. NIPCOV, 303 E. Main, Barstow, Ca. 92311.

GUARANTEED STATE PHOTO Identification Card: (Polaroid® Process). Authentic look. Send photo, signature, birthdate, statistics. Free birth certificate. Rush $7 (3/$15). I.D.–HT1, Box 1033, Evanston, Ill. 60204.

EXCLUSIVE SINSEMILLA HAwaiian Kona gold coast astrological and organic growers manual for 1978, $10. TIGER MANUALS, P.O. Box 1447, Kealakekua, Hawaii 96750.

NO MATTER HOW YOU GROW: The Art of Gold, an amazing guide to sweet golden smoke; $2. 125 S. Gentry, Bloomington, Ind. 47401.

MOVIE POSTERS, LOBBY cards, stills, much more. Actual material used by theatres. All current film titles in stock. Send $1 for catalog (refundable). CINEMA CITY, P.O. Box 7406, Dept. H, Ann Arbor, Mich. 48107.

MARIJUANA GROWING SUPplies. Complete, portable, indoor systems in kit form. One-evening assembly. Nothing to build. For home or apartment. Catalog, 24 pp., $1. HIGHLANDER PRODUCTS, Box 2620, Newport News, Va. 23602.

FREE: 20 PROMOTIONAL CIG-

arette lighters (one order per person; offer expires September 30, 1978). Send $1 shipping & handling: A.B.J. SALES UNLIMITED, 17 Keil Avenue, Butler, N.J. 07405.

REMOVE HARSH ODORS AND tastes from pipes with Cleano Pipe. Send $5.95 to CPR ENTERPRISES, Box 101, Acton, Mass. 01720.

FANTASY EXPEDITIONS—THE ultimate trip! P.O. Box 1266, Ft. Collins, Colo. 80522.

FREE: FOUR PACKS OF SMOKing papers when you send name & address: GYPSY VILLAGE, Seminole Plaza, Casselberry, Fla. 32707.

FOR SALE. MARIJUANA BOOK collection. Over 300 items rare and op. 512-478-3916.

NEED NEW IDENTIFICATION? FULL-COLOR ID cards, birth certificates. Details on drivers licenses, SS cards, passports—25¢. EDEN PRESS, Box 8410-HC, Fountain Valley, Ca. 92708.

INSURANCE FOR YOUR AUTO, van, truck, cycle; low rates; no one refused, regardless of record (must have Florida address); all transactions strictly confidential. Call: BOB LANCASTER, (305) 453-0100, Merritt Island, Fla. 32952.

GEN. PERMIT—CONSTITUtionally guaranteed. One wallet-size permit, $5. REX, Box 468, Hesperia, Ca. 92345.

MAKE YOUR OWN ISOmerizer. Complete instructions $5. TAPCO, P.O. Box 981, Middletown, Conn. 06457.

MAIL POT UNDETECTABLY. Safe from dogs, x-rays. Guaranteed method $2. P.O. Box 1362, New York, N.Y. 10019.

176-PAGE CATALOG WITH thousands of chemicals, glassware items, scales and instruments. All mail order. Send $1 to MERRELL SCIENTIFIC, Dept. T-1, 1665 Buffalo Road, Rochester, N.Y. 14624.

OPPORTUNITIES

IMPORT OR TRANSPORT your planes or mine. Anything, anywhere, anytime. Experienced. OCCUPANT, P.O. Box A228, Waukegan, Ill. 60085.

AUSTRALIA—NEW ZEALAND! Hiring all occupations. Big pay. Transportation. Listings $2. AUSTCO, Box 8489-Z, Long Beach, Ca. 90808.

WANTED: SALES REPRESENtatives (college student OK) for our extensive paraphernalia products. Dealers write for free catalog. INDIACRAFTS, 2901 Mariposa, San Francisco, Ca. 94110. (415) 621-4545.

WORLD IMPORTERS DIRECtory. $3. NORTHERN HOUSE, Dept. IHT, 2437A North Booth, Milwaukee, Wisc. 53212.

DEALERS WANTED. $400 weekly, spare time. BRADLEY'S PUBLISHINGS, Box 37HT, Lusk, Wyo. 82225.

GROWING AIDS

COLCHICINE, 100% PURE. $8/100mg package. GREEN GOURMET, Box 1292A, Detroit, Mich. 48232.

HYDROPONICS, THE RIGHT way. 6-plant automatic system fits in a closet. Build it for $60, plans $3. P.O. Box 4104, Napa, Ca. 94558.

WE MANUFACTURE PIPES, clips, etc. Send $1 for catalog. See our low prices. Distributor, retailer inquiries invited. MR. ZIGG'S, Box 238, Underhill, Vt. 05489.

WANTED

College Campus Dealers for

HIGH TIMES MAGAZINE

For Information Call Jack

(212) 481-0130

Home Grown with HIGHLANDER

See our classified ad

NOTICE:

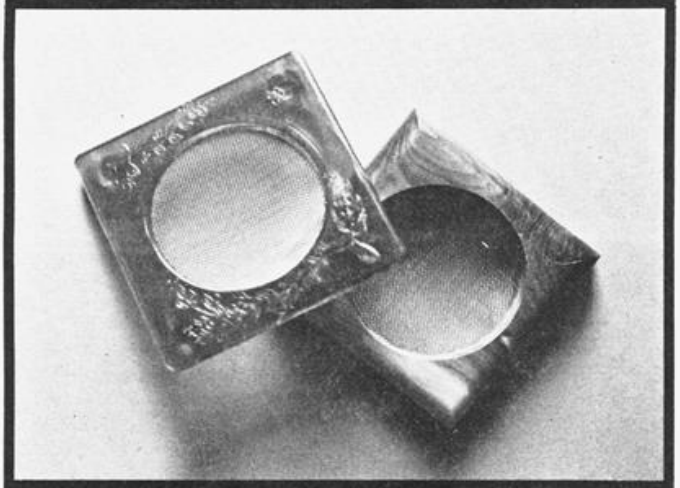
Record Raters Wanted

(No experience required) Each month you will receive nationally released albums to rate. **There is no extra charge for the LP's you receive** — all you pay is a small membership fee which covers all costs of the LP's including postage and handling. In return for your opinion you will build a substantial album collection - "first come basis." For application write:

E.A.R.S. INC.
Box 10245 Dept. H
5521 Center St. Milwaukee WI 53210
"Guaranteed"

SCREENZ®

The Original Snow Screen



MAKES A LITTLE GO A LONG WAY!
Powders and fluffs your stash.

COLORFUL MOLDED PLASTIC ___ $6
HANDMADE HARDWOOD ___ $7.50
EXECUTIVE MODEL (Exotic Woods) ___ $24 (not pictured)

For immediate delivery send cash or money order.

P.O. BOX 9348 DEPT. 36
ALBUQUERQUE, N.M. 87119
(505)255-3367

©1978



Introducing

the stash COMPACTOR

$20.00 Post Paid

A sensible alternative to isomerization!

The **STASH COMPACTOR** safely and easily transforms your stash into highly concentrated pellets. Concentration reduces oxidation and breakdown of THC molecules in the stash and insures far more potent hits.

- **Safe, simple operation**
- **Uses no chemicals or electricity**
- **Adjustable pellet size**
- **Lifetime Guarantee**

The pellets are fun to make, easy to handle and simple to store. They burn smooth, slow and mellow. Easy to pop too! The **ALL NATURAL** way to concentrate and preserve your stash!

Catalog of other fine products, $1.00 refunded with first order.

(Wisconsin residents please add 4% state sales tax)

AEF Industries™
Pellet Products Division
Dept. A-6
P.O. Box 27343
Milwaukee, WI 53227



AFGHANISTAN

Local kabul hash	good	oz	1-2
		kilo	40-70
Water-pressed hash	marbled	oz	2-3
		kilo	100-175
Shirac hash	stupefying	oz	5-8
		kilo	50-80
Mazar-i-sharif	black, primo	oz	5-10
		kilo	150-250
Opium	knockout	6 pipes	20

AUSTRALIA

Domestic bush grass	average	oz	30-35
		lb	400-460
Superior domestic	top quality	oz	45-55
		lb	575-700
Thai sticks	excellent	one	15-18
Domestic grass on sticks	inferior	one	12-15
Black Napalese hash	slabs	oz	200-300
		lb	2000-3000
Lebanese hash	taste treat	oz	200-300
		lb	2300-2900
Domestic hash	truly inferior	oz	15-20
		lb	1400-1800

BRAZIL

Amazon grass	excellent, increasing	oz	20-25
		lb	200-300
Paraguayan grass	sublime	oz	25-35
Cocaine	the toast of the Copacabana	gm	40-50
		oz	650-800
LSD	dandy windowpane	hit	2.50-3.50
Magic mushrooms	4 bites to heaven	15 gm	10-15

CANADA

Domestic	off season	oz	10-20
		lb	100-125
Top-grade Mexican	rare of late	oz	40-50
		lb	475-700
Commercial Colombian	glut	oz	30-45
		lb	350-450
Connoisseur Colombian	increasing flow	oz	40-60
		lb	450-550
Hawaiian	variety, good to excellent	oz	180-200
		lb	2000-3100
Thai sticks	up	one	20-25
Afghani hash	black slabs, worthwhile	oz	160-200
		lb	1200-1800
Kashmiri hash	excellent when found	oz	180-220
		lb	1800-2500
Honey oil	amber, tremendous	gm	35-50
		oz	450-600
Magic mushrooms	off-season, but there	oz	30-50
LSD	blotter, microdot, *caveat emptor*	hit	1-3
		100	100-250
Cocaine	short and sweet	gm	75-125
		oz	1450-2000
MDA	available in east	gm	40-60

COLOMBIA

Santa Marta gold, red	good selection, quantity	oz	4-10
		lb	55-75
Commercial	leafy brown	oz	2-4
		lb	30-40
Colombian hash	improving, still ho-hum	oz	10-30
		lb	750-1250
Colombian hash oil	poor to fair	oz	150-200
		lb	1000-1250
Mushrooms	OK supply	oz	3-5
		lb	100-300
Cocaine	excellent flake and rock	oz	100-300
		lb	2500-3000

DENMARK

Domestic	smoked out, some private stash	oz	10-15
Moroccan hash	good kif mix, light green	gm	2.50-4
		kilo	1700-2200
Lebanese hash	stepped on badly	gm	1.50-3
Afghani hash	primo	gm	3.50-6
		kilo	3000-3500
Pakistani hash	plentiful, improving	gm	2.50-5
		kilo	2200-3500
Nepalese hash	fresh supply	gm	3.50-6
		kilo	3000-4000
Cocaine	increasing quantity, variable quality	gm	100-150
		oz	2000-2500
LSD	microdot	hit	2.50-3.50
Opium	mostly in-crowd, not commercial	gm	10-12

ENGLAND

African grass	plentiful	oz	35
Moroccan hash	small amounts of quality	oz	30-40
		lb	400-600
Lebanese hash	cloth wrapped, OK	oz	70-100
		lb	800-1000
Afghani hash	thin slabs, good	oz	75-150
		lb	800-1250
Colombian hash	quality up	oz	50-65
		lb	500-800
Hash oil	some Afghani	gm	25-35
		oz	375-500
LSD	big blotter	hit	1-1.50
		100	75-150
Cocaine	OK to good	gm	75-150
		oz	1600-2000
Mandrax	large demand, steady supply	one	1-3
		100	100-200

GERMANY

Afghani hash	good to excellent	oz	50-75
		lb	500-725
Lebanese hash	soft red, good	gm	2-5
		kilo	1200-1350
Moroccan hash	just OK	oz	35-50
		lb	475-575
Thai sticks	high quality	one	15-25
		100	800-1200
LSD	blotter	hit	2.50-5
		100	200-400
Cocaine	decent supply	gm	65-110
		oz	500-750

ITALY

Congolese grass	just stash, not much weight	oz	25-40
		lb	240-340
Lebanese hash	chokin' red	oz	80-100
		100 gm	175-300
Afghani hash	bubble-gum black, very potent	oz	90-115
		100 gm	290-400
Moroccan hash	decent green	oz	75-95
		100 gm	170-240
LSD	scarce	hit	3-5
		100	250-400
Cocaine	excellent rock	gm	90-140
		oz	2000-3000

MEXICO

Torreon violet	breathtaking	oz	8-12
		lb	30-75
Oaxacan tops	rising potency	oz	4-6
		lb	50-90
Guerrero gold	smooth, but seedy	oz	3-6
		lb	20-50
Pueblo	good	oz	3-6
		lb	20-70
Magic mushrooms	fresh, excellent	oz	5-10
		lb	50-125
Cocaine	brown to pure white	gm	30-50
		oz	300-500
Opium	not much	oz	30-50
		lb	300-400

SPAIN

Spanish *griffe*	good grass	oz	15-20
		kilo	400-500
Moroccan hash	fresh commercial chocolate, good	oz	40-50
		kilo	1000-1200
Lebanese red hash	sacks blond & red, not the best	oz	50-60
		kilo	1500-1700
Chitral hash	hard to find	oz	70-80
		kilo	2000-2500
Hash oil	Moroccan dark green, abundant	liter	1200-1500
LSD	good blotter	hit	3-5
		100	200-300
Cocaine	good to excellent	gm	80-120
		oz	1000-1500
Quaaludes	different kinds, in quantity	100	20-25
		1000	2000-2250

USA

Contiguous

Top-grade Mexican	tasty colas	oz	30-60
		lb	150-400
Quality Jamaican	good brown	oz	30-40
		lb	125-300
Jamaican Lambs Bread	fickle supply but excellent	oz	100-150
		lb	1500-2000
Commercial Colombian	mucho	oz	25-40
		lb	250-400
Connoisseur Colombian	likewise	oz	40-50
		lb	375-650
Seedless Colombian	top stuff, scarce	oz	50-75
		lb	750-1000
Crystal methedrine	ace	gm	40-75
California sinsemilla	delish	oz	125-175
		lb	1000-1750
Hawaiian Puna buds	astronomical	oz	100-175
		lb	800-1200
Moroccan hash	slow mover	oz	75-100
		lb	625-800
Lebanese hash	dirty blond, sleepy	oz	85-120
		lb	1000-1400
Black Afghani hash	overpriced, fair	oz	150-200
		lb	1500-1800
Nepalese hash	pressed balls, knockout	oz	100-150
		lb	1000-1200
Paki hash	just decent, no buy	oz	75-100
		lb	800-1200
Thai sticks	the bigger, the better	one	15-30
		oz	150-175
Hawaiian	rare	oz	150-175
		lb	1000-1750
Hash oils	potent Afghani to honey	gm	25-40
		oz	400-800
PCP	powder, the pits	gm	60-75
LSD	blotter, microdot, others	hit	2-3
		100	75-200
Psilocybin mushrooms	available fresh, frozen	oz	25-45
		lb	100-250
Peyote	budding	oz	100-150
Quaaludes, 714s	rare, many "boots,"	one	3-5
		100	350-500
Cocaine	various qualities	gm	60-120
		oz	1000-2000
California red hair	tasty, potent, plentiful	oz	50-125
		lb	450-1000

Alaska

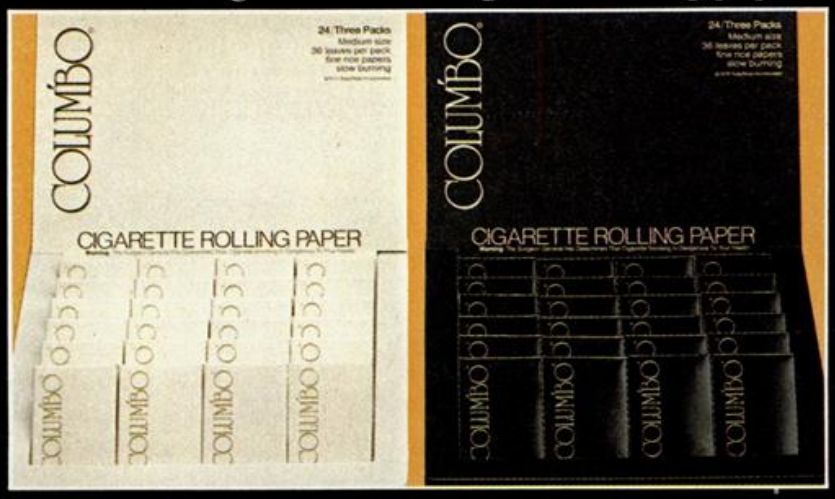
Domestic	market down	oz	25-40
		lb	250-350
Regular Mexican	thin supply	oz	25-35
		lb	250-350
Cocaine	fair to good	gm	100-120
		oz	1500-1750
Colombian	mostly commercial	oz	50-100
		lb	500-700

Hawaii

Kona gold	piney taste, excellent high	oz	30-75
		lb	750-1000
Maui	delicious, tourist prices	oz	40-60
		lb	750-1000
Kaui	stoney, overpriced	oz	40-50
		lb	1000-1250
Puna buds	sweet, red	oz	30-50
		lb	500-1000
Oahu shake	nice buzz	oz	20-40

High Times **welcomes anonymous reports, but please be specific about the area, type, quantity and quality of dope referred to. If you are aware of other prices or have other relevant information or suggestions, please send them in. The THMQ is intended solely for comparative purposes and in no way is meant as an inducement to illegal activity, or as an endorsement of dope usage or trafficking, or as an endorsement of any particular dope.**

A whole new generation of cigarette rolling papers!



You remember how it was a decade ago: paisley print shirts and Day-Glow posters, flowered ties and Nehru jackets. The cigarette rolling paper industry was in its infancy, just beginning to boom. Those first early papers very much reflected the sign of the times.

But today there is a choice, because today there is COLUMBO...a new standard in cigarette rolling papers, by RubyRose. COLUMBO was created after nearly a half a decade of intensive research and development. Close examination of our new thinner paper reveals a scientifically designed ring configuration to help ensure an incredibly smooth, even smoke all the way down. Our new glue holds firmly with no unsavory taste.

And each paper is delicately embossed in gold or silver with the award winning COLUMBO signature...our symbol of excellence.

In addition to quality, COLUMBO offers value. Each box contains three self-dispensing packs housing 36 medium width papers each (most brands contain only 24 to 32 sheets). COLUMBO papers are available in two striking package designs: white with gold and black with silver.

Undoubtedly COLUMBO is not for everyone...it is for those of discriminating style and taste who appreciate quality and enjoy the signature of success.

COLUMBO—a decade ago we didn't exist. Now we've created a whole new generation of cigarette rolling papers.

COLUMBO®
CIGARETTE ROLLING PAPER





The COLUMBO T-Shirt. Hand silk screened on a blend of softest cotton and durable polyester for superb fit and long wear. Comes in both men's and women's sizes. Colors: black with silver or white with gold. Available exclusively through RubyRose Incorporated.

To obtain your COLUMBO T-Shirt, send the attached coupon with your check or money order to:

T-Shirt HT
RubyRose Incorporated
P.O. Box 3720
Beverly Hills,
California, 90212

California residents add 6% sales tax. Handling and shipping costs included in the price of the T-Shirt

PLEASE CHECK STYLE, COLOR, SIZE & SEX OF SHIRT(S)

$8.00 A 8.00 B 8.00 C 10.00 D

SEX M F

COLOR B W

STYLE A B C D

SIZE S M L XL

NAME _____

ADDRESS _____

AMOUNT ENCLOSED $ _____

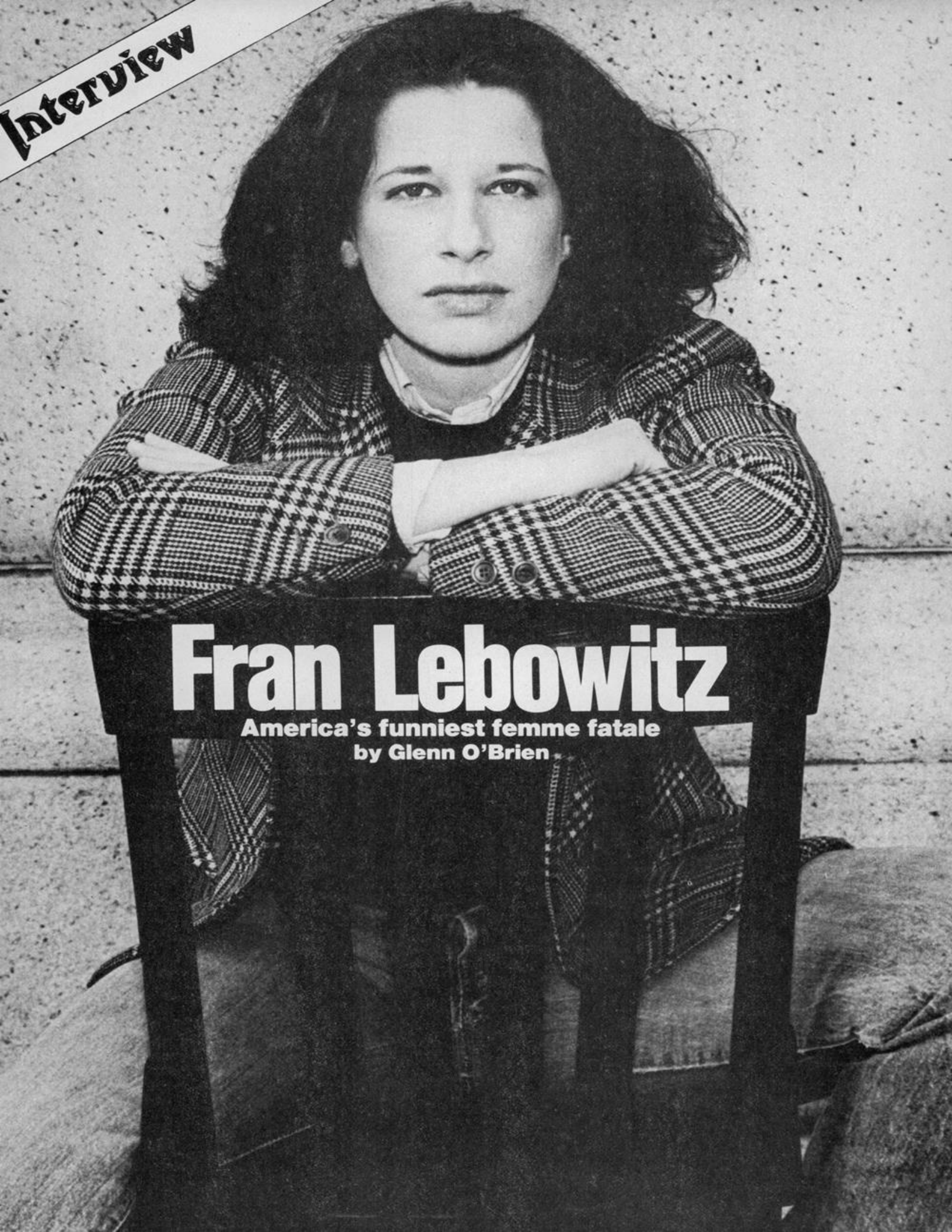
Send to RubyRose, Inc.
P.O. Box 3720
Beverly Hills, CA
90212
HT

©1978 RubyRose Incorporated

Distributed by • Wenmar Int. Corp.
Carson, Calif. 90746

Warning The Surgeon General Has Determined That Cigarette Smoking Is Dangerous To Your Health

Interview



Fran Lebowitz

America's funniest femme fatale

by Glenn O'Brien

At the age of 27, Fran Lebowitz has been suddenly hailed as the funniest writer to come down the pike since Dorothy Parker or, by some accounts, Oscar Wilde. There are a lot of funny people around, and a lot of writers too, but somehow the combination of great humor and great writing has become an exceedingly rare commodity in the modern world. And that's why Fran's first book, Metropolitan Life, *has become a smash hit.*

Fran began her pro writing career at 20. She had managed to infiltrate the staff of a New York underground arts magazine called Changes as an ad sales person and eventually conned her way into writing assignments. At first Fran had to sneak in her own brand of humor. Then, in 1972, she began writing for Andy Warhol's Interview. Interview was then a film magazine, and it reviewed almost every film that was released. Fran's column was called "The Best of the Worst"; her job was reviewing the best of the current bad films, and she worked as hard as a Variety critic, taking in two or three screenings a day. As a result, the column was the last word on Hollywood's follies, and it was also hilariously funny, winning her a small cult of fanatical fans.

But after a while Fran outgrew the bad-flick format. She needed something bigger to disapprove of, and so her column became "I Cover the Waterfront," and her beat became the entire universe of questionable taste. Fran took on modern manners, aesthetics and culture the way William Buckley takes on liberalism. But her crankiness betrayed a heart of gold. Although complaint was her form, the result was a celebration of practical intelligence, a kind of Dr. Atkins epicureanism.

And as Fran took on polyester, landlords, press agents and pop psychology, her reputation grew. She began a similar column (although PG rated) in Mademoiselle. And soon she had a book offer from a fan in publishing. Metropolitan Life, *published by E.P. Dutton, is a collection of Fran's columns. There's an out-loud laugh (or more) on every page, as well as many passages destined for the quotation dictionaries, and the best epigrams written since the invention of television.*

Ms. Lebowitz was interviewed by Glenn O'Brien, a longtime friend who has proposed marriage on several occasions.

"My inspiration for wanting to be a beatnik was not Allen Ginsberg or Jack Kerouac but Maynard G. Krebs from the 'Dobie Gillis' show."

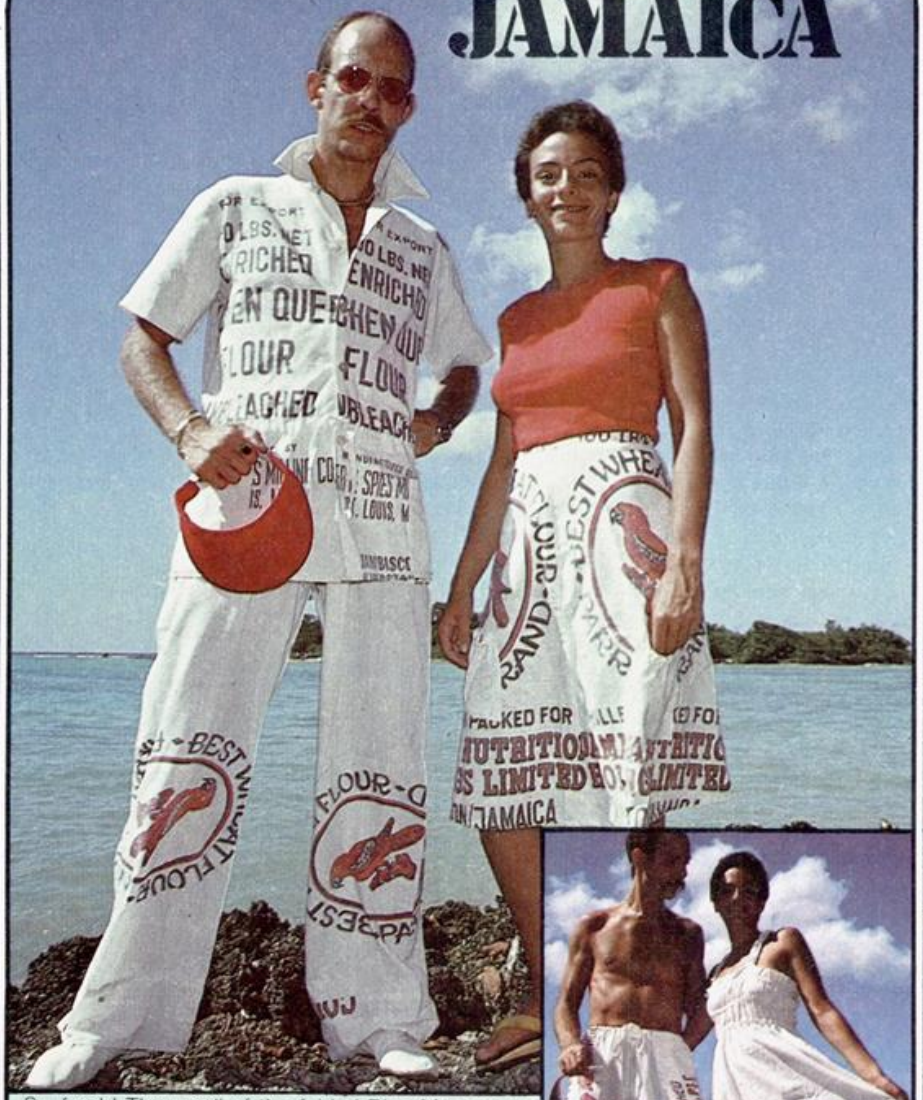
High Times: What were your first words?
Lebowitz: "Daddy." My mother taught me to say that so I would wake my father up instead of her.
High Times: Do you remember the first funny thing you ever said?
Lebowitz: No. I can't remember the last funny thing I ever said.
High Times: Were you a behavior problem in school?
Lebowitz: I was a behavior problem as far as talking. I talked out of turn, I talked too much, I talked in class, I made jokes during the lessons, I whispered to other children. I wasn't an interesting behavior problem. I wasn't glamorous and rebellious. I just talked too much. My first school punishment was sitting in the corner in kindergarten wearing a Band-Aid over my mouth and holding up a sign that said "I am a chatterbox." That was my first run-in with authority.
High Times: Did you watch television as a child?
Lebowitz: I don't really remember it. The only shows I remember when I was a little kid are Miss Frances's "Ding Dong School," which I watched because everyone made fun of me because my name was Frances. Also a TV show that was on Sunday morning for four hours; I can't remember the name of it, but Sonny Fox was the emcee. Children played marbles on it. There was nothing televisiony or psychological about it. It was like watching children at a birthday party. Children would get up to watch other children playing marbles and Ping-Pong and stuff like that.

I was a big fan of "Sky King." "I Married Joan," "I Love Lucy," I loved all those situation comedies. I loved getting the measles and colds so I could sit on the couch and watch all those morning situation comedies. "The Great Gildersleeve." I never watched TV at night because my mother put me to bed at 7:30 until I was 12. I went to bed earlier than anyone in the world.
High Times: What did you do in bed?
Lebowitz: Actually my main occupation in bed was book reports. In my grammar school we got extra credit for extra book reports. So I would lie in bed and make up book reports about books that I made up. These were oral book reports. I would stand in front of the class and report on a book I had made up. And at the end of the book report you were supposed to tell people where they could get the book, and I would always say, "You can get this book in the Derby Library in Derby, Connecticut, where my grandmother lives."
High Times: What was your best subject in school?
Lebowitz: Smoking.
High Times: When did you start smoking?
Lebowitz: When I was 12.
High Times: Why did you start smoking?
Lebowitz: To be glamorous. It was really a passion with me. I loved to smoke. I would wake up and be so excited because I could smoke.
High Times: Did your mother know?
Lebowitz: I guess after about six months I started getting caught constantly. It became the major thing I was punished for. I think my most enormous smoking punishment was being grounded for a month. The day my grounding was up and I was going to be allowed to go out on Saturday



All photographs by John Beam

SMUGGLED FROM JAMAICA



So fresh! The smell of the fabled Blue Mountains still lingers in each of these individually crafted outfits. Made of pure linen collectors' fabric. Each with its own unique design, these pocketed garments are perfect for year-round, indoor-outdoor wear. Produced in the Jamaican Mountains and brought to you by the Jamaican Connection of N.Y. Each piece is specially made to order, and if you send along your measurements you'll be sure to get a finely tailored fit.

Price		Quantity
$12.	Drawstring Pants	☐ Length ___ inches
$ 8.	Shorts	☐ S-M-L
$12.	Skirt	☐ S-M-L
$ 6.	Halter	☐ Chest ___ inches
$15.	Belted Jacket	☐ Chest ___ inches
$12.	Shirt	☐ Chest ___ inches
$15.	Dress	☐ S-M-L

Mail to: The Jamaican Connection
G.P.O. 1599
New York, N.Y. 10001

Name _____

Address _____

City _____

State _____ Zip _____

Please add $1.50 Packing & Shipping, New York residents add 8% Sales Tax

I got the flu and was sick for two weeks. I was caught all the time.

Then I started getting suspended from school for smoking. At my high school they employed a woman known as the matron whose sole job was to go into the girls' bathrooms and catch people smoking. But there was a myth about her. It was like the myth where if a girl gets pregnant and takes the boy to court, if three other boys come into court and say that they had slept with her, they would all get off scot-free.

Well, huge myths grew up around the matron at my school. Everyone thought that to actually suspend you for smoking the matron had to catch you either holding a cigarette or with the smoke coming out of your mouth. Once a girl was sitting on the window ledge smoking a cigarette and the matron walked in and the girl jumped out the window. That was on the second floor.

Another time I saw a real pretty girl standing in front of the mirror with a little tiny cigarette butt hanging out of her mouth, teasing her hair. And the matron walked in, and the girl actually swallowed it. I was caught smoking, and I didn't have the cigarette in my hand or smoke coming out of my mouth, and they suspended me anyway, so it turned out not to be true. Just suspicion was enough.

High Times: What brand did you smoke?

Lebowitz: Tareyton, because that's what my mother smoked. I used to steal hers. When she started realizing cigarettes were missing it never occurred to her to accuse me, so she went to the supermarket where she bought her cigarettes and told the manager that the boys who worked there were stealing packs out of the cartons. She said they'd take one pack out and then move the rest up.

High Times: What brands have you smoked since then?

Lebowitz: I smoked Tareyton the longest, then I switched to Lark. Then I moved to New York and switched to exotic foreign brands. Gauloises, English Ovals, any cigarette that looked like it would annoy people. Black cigarettes, every horrible adolescent smoking gesture imaginable. I rolled my own cigarettes. After that I switched back to Larks, and I smoked those for a really long time. Then I switched to Vantage. Then to Merits. Then I switched to Carlton in an attempt not to smoke too much, and now I smoke nine times more Carltons than I ever smoked anything else.

High Times: What was the first thing you wanted to be when you grew up?

Lebowitz: A writer. It was the only thing I wanted to be except for a brief flirtation with wanting to be a cellist. I played cello in the school orchestra, but I was so horrible that I soon got over the notion of being a cellist. When I was really young I wanted to be a toll taker because I thought they kept the money. I thought they owned the roads; I always used to tell my



"I went through a period of watching '$20,000 Pyramid,' but it was frustrating because every day I won $20,000 and I still have no money."

parents I wanted to be a toll taker, and they couldn't imagine why.

High Times: What was the first thing you wrote as a serious attempt to be a writer?

Lebowitz: I wrote a book when I was about eight called *The Secret Castle* that owed a lot to Carolyn Keene, who wrote the Nancy Drew books. I wrote it in a loose-leaf notebook in pencil. I had this aunt who had a book called *The Night Visiters*. It was written in the nineteenth century by, I think, a seven- or eight-year-old child who was the daughter of someone very rich who had this book printed. That's why "visitors" was misspelled. I just knew an eight-year-old wrote it and it was published. I didn't connect with the fact that her father was a lord and that he had it privately printed, and that my father was not a lord—he owned a furniture store and had no intention of having a book privately printed. So I wrote *The Secret Castle* and was very disappointed to discover that no one published it.

I also wrote plays for my cousins to perform at various family gatherings. I also used to write a zillion songs. I took popular tunes, like "Michael Row the Boat Ashore," and wrote lyrics having to do with my family. I wrote a musical comedy for my grandparents' 35th wedding anniversary. I wrote for the school newspaper. I wrote an editorial about the matron and got kicked off the paper.

Then I went to a prep school that had a paper called the Wilson Wyndowe. We went to the Stratford Shakespeare Festival in Connecticut and interviewed the star of the play, and I wrote this incredibly bitchy Rex Reedish interview with her and got an outraged letter from her press agent. Maybe 20 people had read it, and he acted like it was in the Daily News. I was really very proud of that.

High Times: Tell me about your career as a poet.

Lebowitz: I don't think I was a poet for even an entire year. I was a poet for about nine months. I started being a poet when I lived in Poughkeepsie, and I wrote a book of poetry called *Poughkeepsie Blood*. My first action on coming to New York was walking into Grove Press, plunking down the manuscript and demanding they publish it. Fortunately they didn't, so it's not around to haunt me.

High Times: What was the style? French symbolist?

Lebowitz: No. I had never really read any poetry, so it was a completely invented style. It was kind of adolescent-petulant—sulking, rebellious. It didn't rhyme. There were maybe 40 poems, the only poems I ever wrote. There were two funny ones that were real crowd pleasers when I used to read them. During the time that I read poetry, because I was such a wonderful reader of it, people who actually had a legitimate interest in poetry would hear me and ask me to send it to them because they thought it was good. And then they would get it, and I would get these polite little letters back rejecting it. I'm happy none of it was ever published.

High Times: Where did you read?

Lebowitz: The Village Vanguard. That was actually a job. I saw an ad in the Village Voice that said "Wanted—Poets." This really weird guy named Jack Scully, who was an ex-monk, had somehow convinced Max Gordon, who owned the Village Vanguard, that the fact that the Vanguard was empty during the day was losing him a great fortune. It wasn't enough that he had Charles Mingus playing there every night.

So Scully put on something called Village Varieties, and he hired all these teenaged artists-to-be, and it opened at ten in the morning and closed at six. Customers paid 99¢ an hour to listen to this garbage. I'd read five or six each time I went on. And sometimes I went on at ten o'clock in the morning and read to the guy sweeping up from the night before. It's very disconcerting to be in the basement of a night club at ten o'clock in the morning reading poetry on a stage with a spotlight on you and no one there.

But I thought it was a job. I got up every morning, brushed my teeth and went to the Village Vanguard and read poetry. They had a very weird array of people who worked there. They had one guy who was like an Elvis imitator, only he imitated Oscar Wilde. He was the only one of us to break out into the big time, because he got a job on the first gay cruise ship. We were all really jealous of him. The rest of them were mostly folksingers and blues musicians and other horrible poets. There was one 75-year-old woman who was a torch singer; she had varicose veins, and she'd get up on this stool and sing Marlene Dietrich songs, also at ten in the morning.

High Times: Were you a beatnik?

Lebowitz: I was beatnikesque. I wanted to be a beatnik. But I wanted to be a beatnik when there were already hippies. My inspiration for wanting to be a beatnik was not Allen Ginsberg or Jack Kerouac but Maynard G. Krebs from the "Dobie Gillis" show. The first time I ever came to New York by myself, I snuck to New York on a bus and bought a pair of bongo drums with all the money I'd saved my whole life, which was $12.

High Times: How far did you get in school?

Lebowitz: I was unceremoniously expelled from prep school in my senior year for no apparent reason. I didn't do anything interesting. I didn't lead a riot or set fire to the gym or do anything James Deanish. Just one day the headmaster woke up and thought, "She's really not our type." I was home sick when I was expelled.

High Times: Did you ever worry about not graduating from high school?

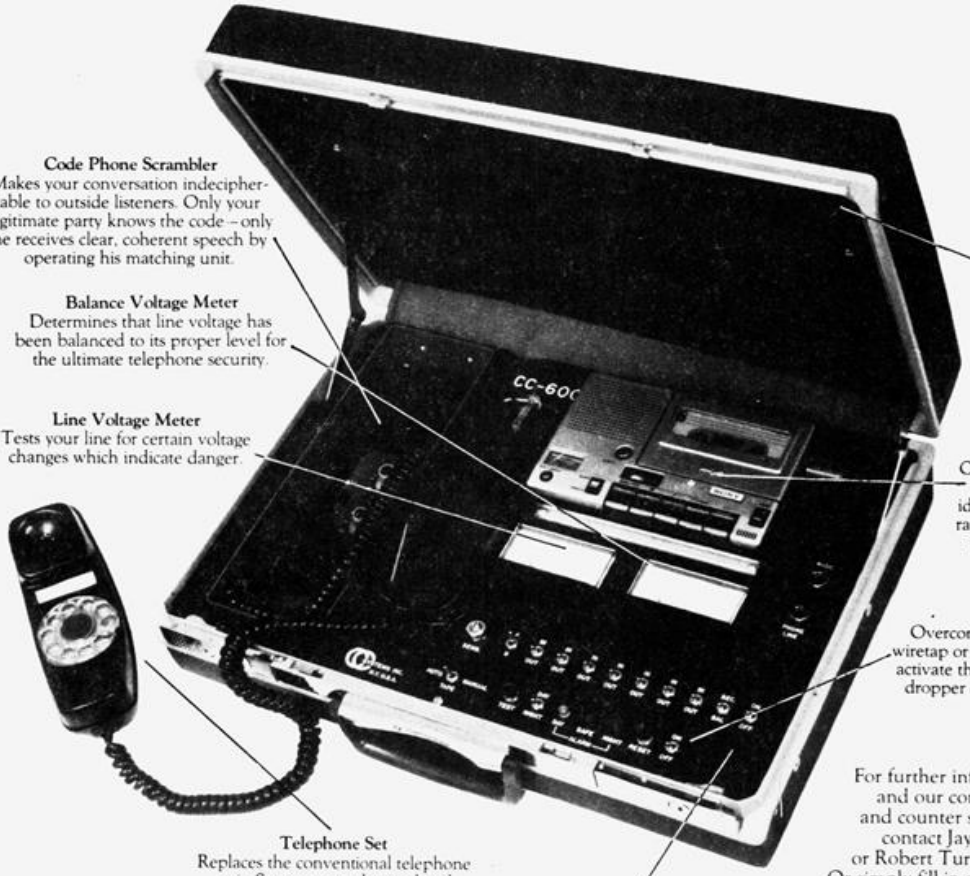
Lebowitz: I didn't worry about it. My parents did. I was quite happy to be out. My mother and father thought that because I didn't go to college I'd probably end up working in the five-and-ten. They had a vision of me in a pink smock with a little square badge on it saying Fran. But I did actually graduate from high school, because I took the New Jersey High School Equivalency Test. So I have a state diploma. I can't imagine what I could have done with it. I guess I could have gotten into driving school.

High Times: What jobs have you had besides writing?

Lebowitz: I've had a number of interesting, colorful jobs. I drove a taxi. I was a chauffeur for Johnny and Edgar Winter. I

The CC600 and why it's your absolute privacy.

No single system can provide absolute telephone security. So we designed the CC600 to be more than a single system. By combining four distinct security features, the CC600 actually becomes its own back-up. Which means stronger defense in even the tightest security situations and a telephone virtually impenetratable to eavesdropping.



Code Phone Scrambler
Makes your conversation indecipherable to outside listeners. Only your legitimate party knows the code – only he receives clear, coherent speech by operating his matching unit.

Balance Voltage Meter
Determines that line voltage has been balanced to its proper level for the ultimate telephone security.

Line Voltage Meter
Tests your line for certain voltage changes which indicate danger.

Sturdy Attache Case
Resists shock and incorporates all systems in one lightweight, portable package.

Telephone Monitor
Can furnish actual evidence of a tap being installed and possibly, the identity of your enemies. Used separately, it supplies permanent proof of important telephone agreements.

Line Tap Defeat
Overcomes virtually every known wiretap or telephone compromise. Deactivate the unit and feed your eavesdropper deliberate misinformation.

Telephone Set
Replaces the conventional telephone unit. So even pay phones, hotel phones, and mobile phones can be secure against eavesdroppers.

Telephone Tap Alert
Provides 24 hour surveillance against wiretaps and telephone operated room bugs. If activated in your absence, warning signal remains intact for continuous and automatic protection.

For further information on the CC600 and our complete line of security and counter surveillance equipment, contact Jay Lester in New York, or Robert Turner in Washington, D.C. Or simply fill in and mail the coupon below.

SYSTEMS

COMMUNICATION CONTROL SYSTEMS, INC.
605 Third Avenue, New York, N.Y. 10016 / (212) 682-4637
3507 R Street, N.W., Washington, D.C. 20007 / (202) 659-3432

COMMUNICATION CONTROL SYSTEMS, INC.
605 Third Avenue, New York 10016

Please send me more information on the Secure Communication Control Center CC600.

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____



answered Steve Paul's telephone and was a general schlepper and errand girl for him, and I drove for him. Steve paid me excessive amounts of money to answer his telephone. It was charity really. I sold belts on the street.

And I participated a lot in market research. I got on this list, and I went and discussed products. They would give you $15 and a sandwich. I watched 400 Bayer aspirin commercials. The most interesting one I went to was for a company that wanted to make a vodka for women. This guy came in and showed all these fake advertising campaigns and fake brands of vodka. One was called Catherine the Great, and it had a picture of her on the label. I wanted to know what a vodka for women meant. I guess it didn't go.

I also cleaned people's houses, specializing in venetian blinds. During that period I had stripes cut on my hands. I never had any skilled jobs because I never had any skills. I still can't type.

High Times: I remember telling you you'd never make it as a writer until you learned how to type.

Lebowitz: I'll never make it as a typist. I think I will learn to type. I now dread the getting-it-typed part as much as I dread the writing part. I finish things now, and I think, "Who was the last person who typed for me? Who hasn't typed for me in a long time?" I could probably get a secretary for what I spend getting my friends to type for me. "I'll take you to 21 if you type for me." I've typed some of my columns. The last one took me 11 hours to type. I could have written a trilogy in 11 hours.

High Times: What was it like being a cab driver?

Lebowitz: I was 19 at the time, so I thought it was entertaining. I got a lot of tips. I didn't have any adventures. I picked up two famous people: one was Dr. Joyce Brothers, who undertipped me, and one was Rod Steiger. I met some very interesting taxi drivers. I met one who used to go to Kennedy Airport, to the terminals where people were coming from Florida, and there were a lot of Puerto Ricans who had never been to New York; he used to have a bathroom scale in the taxi, and he would tell these Puerto Ricans that in this country taxi rates were by weight and that it was a quarter a pound or something like that. And he would weigh them. He was the most inventive cabbie I ever met.

High Times: What writers have inspired you?

Lebowitz: I don't know if any inspire me. I know who I like. I like that Oscar Wilde. I like Thurber. I like Dorothy Parker. I like lots of writers, but now I can't think of them.

High Times: How about comedians?

Lebowitz: I like Marshall Brickman. He writes for the New Yorker. I like Woody Allen. Don Rickles. I used to like this guy Milt Kamen. I like Mel Brooks, especially the 2,000-year-old-man records with Carl Reiner. I love Richard Pryor. But I will go see any comedian. Especially really horrible ones. I'm always sorry when I see that someone has tried out 11 new comedians and I wasn't there.

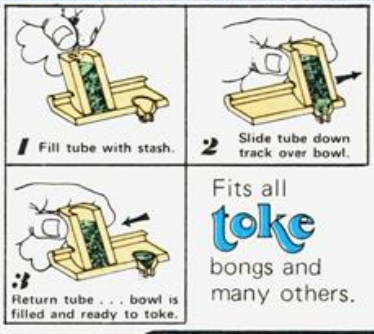
One of my all-time favorite funny people was Jack Douglas. He wasn't a comedian, but he was the funniest talk-show guest. He wrote a lot of books. I read *How to Be a Naked Bus Driver* and *My Brother Was an Only Child*. The first sentence of one of those books was, "It was autumn in New York; you could tell it was autumn because chorus boys all over town were losing their leaves." I thought that was the most hilarious thing I'd ever read. At the foot of his driveway in California, Jack Douglas had a sign that said "Have you called these people?" I also thought Oscar Levant was hilarious. I couldn't imagine knowing someone who was that funny.

High Times: What are your favorite magazines?

Lebowitz: Sepia is my all-time favorite. I like Ebony too, but it's no Sepia. I like Family Circle, Ladies Home Journal, any-

toke-o-matic©





Fits all toke bongs and many others.

TOYS FOR THE MIND™

toke™ international inc.

The world's largest bong manufacturer

© 1978 Toke International Inc.



I can't find your TOKE-O-MATIC anywhere.
Please send me:

____Toke-o-matic(s) $6.00 each_____
Gold Silver Black
Shipping and Handling $1.00 each_____
TOTAL _____

Name_____

Address_____Apt. No._____

City_____State_____Zip_____

Visa/Mastercharge No._____

Expiration Date_____

Send to: Toke-o-matic, Box 9973, Marina Del Rey, California 90291.

For a free retail catalog, send a self addressed stamped envelope.

CRAWDADDY IS AN EVENT!

Read it and create your own.

Each CRAWDADDY features up-and-coming heroes in music, politics and entertainment. CRAWDADDY finds out just *why* and *how* they got there. Month after month our writers, editors and photographers travel around the country to bring the excitement and the answers to you.

INTIMATE JOURNALISM
CRAWDADDY gets up close. Rugged movie star *Clint Eastwood* told CRAWDADDY of his uncertain start as an actor: "I said to my wife, 'I'm going to quit. What am I doing—spinning my wheels? I gotta start doing something with my life.' I was 27."

Rising actress *Susan Sarandon* of *Pretty Baby* admitted to CRAWDADDY she was offered a hefty sum by *Playboy* for a nude centerfold. "If they asked me in the '50s when it would have been shocking, I probably would have done it. But what bothers me is that everyone always looks alike..."

HARD HITTING REPORTS
CRAWDADDY sent war correspondent Michael Herr out to survey the violence of the rock 'n roll battlefield. *The New York Times* called his book, *Dispatches*, "quite simply, the best book about the Vietnam War. It's as if Dante had gone to hell with a cassette recording of Jimi Hendrix and a pocketful of pills." And with combat photographer Tim Page, Herr brought his exclusive story back to CRAWDADDY.

ON TARGET COVERAGE
CRAWDADDY pinpointed the nationwide *Dracula* craze with Broadway's *Frank Langella*. What makes Dracula so very hot? "He's sexy," Langella said. "It's nice to fantasize having a tall dark stranger appear in your bedroom, pick you up flamboyantly, and do it to you in a whole new way."

CRAWDADDY has also focused on the travails and triumphs of Diane Keaton, John Travolta, both Carly and Paul Simon, Sylvester Stallone, Bjorn Borg, Steve Martin, Raquel Welch, the Eagles, Bob Seger, the Not-Ready-For-Prime-Time Players, and many, many more.

BREAKING THROUGH
There's a magic instant which comes for every successful performer when he's found the handle, cut the mustard—done the trick. CRAWDADDY puts you there:

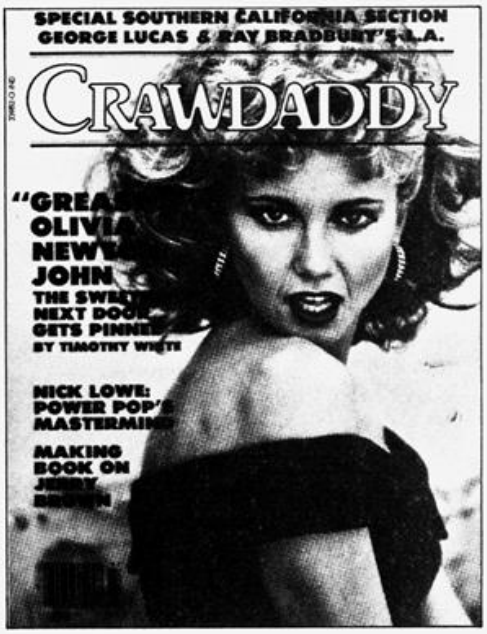
Stevie Wonder: "I hesitated before believing that first moment. It was hard for me to accept that I had something special...."

And *Stevie Nicks*, of *Fleetwood Mac*: "I knew I could get to people when I wrote my first song. I was 16 years old, really upset about my lost love, and I communicated that pain through the song."

Dizzy Gillespie, *Ry Cooder* and others have also revealed their inaugural peaks in CRAWDADDY.

POLITICS, SHARKS AND ROCK 'N ROLL
CRAWDADDY has also uncovered corruption in Washington's Federal Drug Administration, spoken to best-selling author *Tom Robbins* (*Even Cowgirls Get the Blues*) about how he "signed an imaginary contract to lead a life of enchantment," and gone on location with star *Roy Scheider* during the stormy filming of *Jaws 2*.

And each month CRAWDADDY brings you solid on-the-spot interviews with chartbusting bands and the up-and-comers, plus lively reviews of the hot new records.





SEND PAYMENT WITH ORDER AND RECEIVE THIS CRAWDADDY 17"x 14"x 2" RUGGED CANVAS CARRY-ALL—FREE!

SUBSCRIBE NOW!
That's CRAWDADDY. Once a month. Twelve months a year. To subscribe, fill in the blanks, tear out the card and send it back with your check or, if your prefer, we'll bill you. Do it now, and find the upbeat, the offbeat, the downbeat and the Heartbeats turning up in your mailbox—all in the amazing CRAWDADDY.

CRAWDADDY

Enter my subscription and start my coverage at the special low rate:

- ☐ **$7.50 for 12 months (1/2 newsstand price!)**
- ☐ **$15.00 for 2 years**
- ☐ **$22.50 for 3 years**
- ☐ Bank Americard (Visa)
- ☐ Mastercharge
- ☐ Check is enclosed. Send my bag
- ☐ Bill me later

Acct. No. _____

Expiration date _____

Signature _____

Name _____

Address _____ Apt. No. _____

City _____ State _____ Zip _____

Send check or money order to:

CRAWDADDY
P.O. Box 6330, Marion, Ohio 43302

Allow 6 to 8 weeks for shipment.
Add $1 for Canada, $2 for foreign

1/2 PRICE OFFER!

D125

thing with recipes that use marshmallows and American cheese in the same dish. I like Rock Scene, Jet, Bronze Thrills, Interview, Italian Baby Vogue, Used Planes. Used Planes comes out every single month. I like Richie Rich comic books. And I even have the Richie Rich home game. I also have the "Family Feud" home game, but I can't figure out how to play it.

High Times: Did you ever smoke pot?

Lebowitz: Yes, but not with much zeal. It was unavoidable. But I never liked pot much. I was more of a drinker. I did once smoke an ounce of marijuana in one day and ended up in the emergency ward at Mass. General in Boston.

High Times: Why did you smoke an ounce of marijuana in one day?

Lebowitz: Because I was 19 years old. Because I was stupid. Because I had an ounce of marijuana. I was at that time living on the floor of a friend's room at Boston University, and I knew that if I didn't smoke that ounce of marijuana, someone else would. In those days you smoked whatever pot you had that day, so rather than share with others I smoked as much as I could humanly smoke.

When I got to the hospital they did not believe that I had smoked marijuana, I was so smashed. They thought I had taken acid, and I couldn't convince them it was marijuana. Their antidote to this was giving me about 22 Thorazines. I think I got to 2, and then I slept 22 hours. It was a very terrifying experience because when I started to flip out having smoked this much pot I was in a room with people who had also smoked this much pot and no one would help me out.

At that time colleges had these hotlines, and you could call up and say, "My friend just ate 14 pounds of acid," and some graduate student would drive over in his little Chevy and rescue you. On the Boston University phone you dialed N-E-E-D and a concerned Jewish graduate student came over and took me to Mass. General with two other people who were also smashed out of their minds. On the way he started to drive into a tunnel, and I decided they might be going into a tunnel but I wasn't, so I tried to jump out of the car. When I got to the hospital I was restrained.

And I was really distraught. I had been spending all of my time with drug-addict college students. I really wanted someone to save me. I wanted to see Robert Young. But this was the '60s, and there were all of these Harvard medical students there learning to be doctors, so all the doctors in the hospital had hair down to their shoulders and granny glasses. It was terribly disconcerting because I knew that they weren't going to cure me. I thought they'd probably just give me another joint.

They made me wait three hours to see the psychiatrist, and by that time I was starting to come down. The person who checks you in and takes your name and insurance came over to me and actually said, to me, "Why did you choose Mass. General?" And I said, "Because I liked your clever ads."

At that point one of the boys I was with realized I was feeling better and got really mad at me for insisting on going to the hospital, and he screamed at me, which made me perfectly crazy by the time I got to see the psychiatrist. The psychiatrist also had shoulder-length hair and Levis under his white coat, and I spent ten minutes arguing with him over whether I'd taken acid or smoked pot. So he gave me enough Thorazine to put the entire college to sleep.

High Times: Have you ever taken acid?

Lebowitz: No. I was never interested in having such interesting experiences. I didn't want to have my consciousness expanded, I wanted to have it restricted. I wanted consciousness-restricting drugs; that's why I used to like liquor. Now I hate the smell of pot. I'd rather have people shooting up in my apartment; at least I don't have to smell it. Unless they die.

High Times: When you were writing "The Best of the Worst" what was the best bad movie you ever saw?

Lebowitz: I don't remember. American International made so many great movies that they've all melted in my mind into one great A.I.P. movie.

High Times: Did A.I.P. ever react to your devotion to their product?

Lebowitz: Not Samuel Z. Arkoff or anyone, but the press agent there loved me. I remember one of the best days of my life was an all-day A.I.P. screening with three movies and lunch. One of the movies was *The Thing with Two Heads*, starring Ray Milland and Rosie Grier. Ray Milland's head was on Rosie Grier.

One of the other ones was a Manson-type film, a hippie death cult. A.I.P. had one incredible movie after another. *Truckstop Women* was one of my favorites. The title song was sung by a truck. I have a great collection of A.I.P. press handouts. Maybe I'll donate them to one of those film schools in Los Angeles for a tax write-off.

High Times: Did you ever get any bad reactions from your bad movie reviews?

Lebowitz: Not from the people who made the movies. But John Springer banned me from his screenings. He was the only person who took me seriously enough to ban me. And at that time he had every important movie, and that ended my movie-reviewing career. He had only the biggest movies, and he acted like I was affecting the box office. But he was very nice, and in the letter that banned me he told me how much he liked me. I do remember that the worst movie I ever saw was called *Four Flies on Gray Velvet*, with Mimsy Farmer, one of your great loves. But to this day I have never seen a worse movie.

I saw a lot of movies that were never released because people knew of my in-

WHY IS THIS MAN SMILING?



Freedom of Choice.

U.S. Bongs® come in every denomination. From the Mini-U.S. Bubbler. to the 18" double-barrel U.S. II. And whichever genuine U.S. Bong design you choose you get a few things you won't find on any other bongs. Things like our unique multi-chambered filtration system that makes U.S. Bongs not just the cleanest you can smoke, but the smoothest you can buy. Or the patented ash trap that allows you to resmoke nearly 20% of your preferred substance. U.S. Bongs also come with built in shot gun effects, removable wooden bowls for fast refilling, gently contoured mouth pieces and every U.S. Bong is carefully hand-crafted right here in the good ol' U.S.A.

Check out your head shops complete collection of U.S. Bongs, or send for our free catalog, today. And blow your mind the all-American way.

BUY U.S. BONGS

Progressive Plastics, Inc.,
660 Lofstrand Lane, Rockville, MD 20850

Rip Shifter GT T.M.

The **RIP SHIFTER** (GT) gearshift knob is the only gearshift knob that is a completely hidden smoking pipe . . . Never **"search for"** or **"hide the"** pipe again! Just lift off the special (GT) medallion*, drop in our unique pre-measured non-spill smoking bowl . . . plug in the hose and . . . **RIP SHIFTER!!**

- **Beautifully hand-rubbed Oregon Alder**
- **Precision design makes it work great!**
- **Fits any floor stick shift rod**
- **Built to perform — we guarantee it!**

So when you smoke the best, smoke it in the best on any Highway!

KEEP ON SMOKIN' . . .



$19.95 POSTPAID

*(GT) medallion not shown
PATENT PENDING

The Roger Allan Company
407 S.W. 11th Ave., Portland, OR 97205
Since 1972 503-222-4815

☐ Cashier's Check
☐ Money Order
☐ Credit Card
☐ Personal Check

Name _____

Address _____ Zip _____

For Credit Card : ☐ VISA ☐Amer. Express ☐ Master Charge

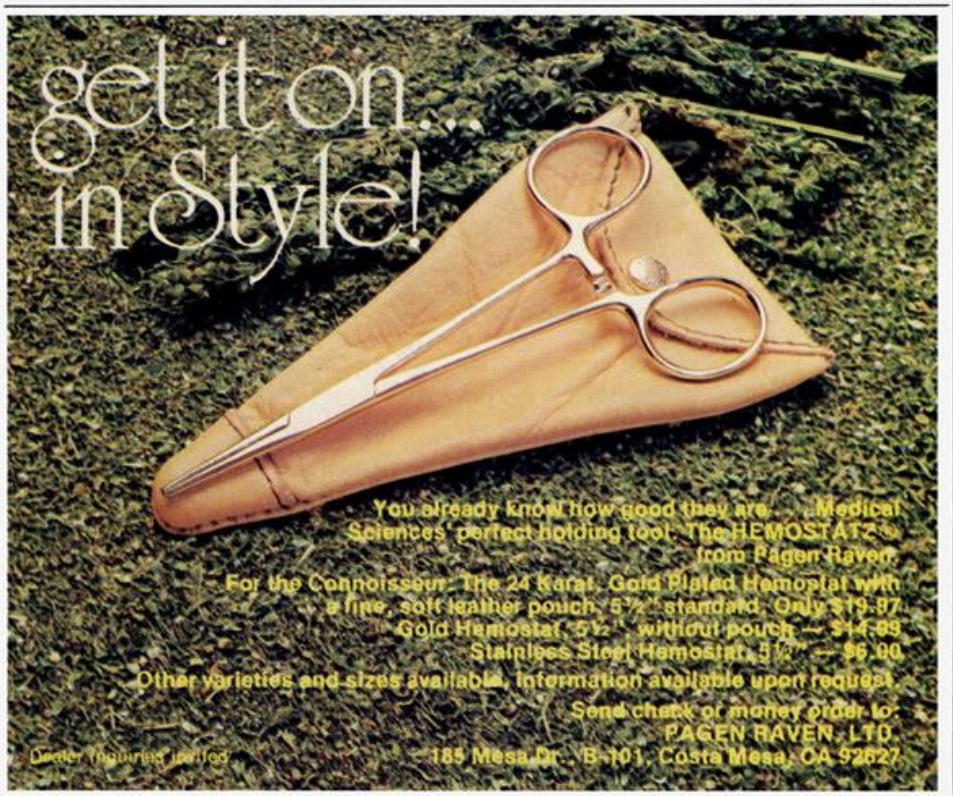
Total $_____ Exp. Date _____

Card No. ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Signature _____

Credit Card Order By Phone: 1-800-835-2246 24 Hours A Day.
Thanks for ordering! You are going to love it!

get it on... in style!



You already know how good they are. . . Medical Sciences' perfect holding tool, The HEMOSTAT, from Pagen Raven.

For the Connoisseur: The 24 karat, Gold Plated Hemostat with a fine, soft leather pouch, 5½" standard. Only $19.97.

Gold Hemostat, 5½", without pouch — $14.99

Stainless Steel Hemostat, 5½" — $6.00

Other varieties and sizes available, information available upon request.

Send check or money order to:
PAGEN RAVEN, LTD.
185 Mesa Dr., B-101, Costa Mesa, CA 92627

Dealer inquiries invited

Enclosed is my ☐ check ☐ money order
for $_____

☐ Gold Hemostat, with pouch
☐ Gold Hemostat, without pouch
☐ Stainless Steel Hemostat, without pouch

Residents of Calif., add 6% Sales Tax.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

terest in that sort of movie, so I often went to distributors' screenings and sat with 12 men with cigars. I liked it better than critics' screenings because they didn't sit there trying to think of entertaining comments; they just sat there with their cigars, trying to figure out how much money they could make on it. I reviewed lots of movies that never opened in New York, only in drive-ins. My whole movie consciousness was based on movies no one else had ever seen. They thought I made them up.

I saw a group-therapy movie—and the whole thing took place in redwood hot tubs with people screaming their problems at each other. And I was once ejected from the Whitney Museum for making comments during a film about baking.

High Times: Tell me about your books before *Metropolitan Life*?

Lebowitz: What books?

High Times: Didn't you write some pornographic books as a struggling artist?

Lebowitz: I only wrote one by myself. I don't remember who published it. I also did some subcontract work for porn writers. I knew about four or five people who wrote porn books at the time that I was a poet. The one I wrote myself was called *House of Leather*. I published it under the name of the headmaster who threw me out of school. I remember I got $500 for it. I just talked it while a speed freak typed it. It was the most money I'd ever made.

They were terrible. They told you what to write. They told you what kind of sex to put in it. What you couldn't have at the time was male homosexuality, because the only books with male homosexuality were for male homosexuals. They had a style sheet that was kind of the opposite of the New York Times. You have to say fuck, you have to have these kinds of sex. It was incredibly boring writing that stuff. As boring as reading it.

High Times: Tell me about your writing habits.

Lebowitz: My writing habits are basically nonwriting habits. I sulk for several days. Then I start thinking that maybe somewhere in the house is a column that I never turned in. This has never occurred. Then I try to bargain with them to wait until I get to the absolute edge of the deadline. I wait until the editor says, "Unless it's in tomorrow morning at ten o'clock we can't run it." Then I stay up all night and do it.

High Times: Do you ever think you can't do it?

Lebowitz: Every single time I've ever written I thought I couldn't do it. But I've never missed a deadline. If I know it's the last day, I always do it. And I always start writing very late at night. I used to start at midnight, but that's gotten pushed up, so now it's common for me to start at three in the morning. I get tired, but fear keeps me awake. I used to be able to do it without feeling it, but now I'm in bed for three days afterward.

The whole time before I write I spend on the phone begging people for ideas and solace and sympathy. My favorite thing to do is to call another writer who has a deadline, because they will stay on the phone with you. Your friends who don't write will not stay on the phone with you, because they have other real things they want to do. If someone else has to write, then you know you have a willing companion to talk to on the phone for hours and hours while they put off their writing.

But now, as I've grown up, all my friends have developed much more mature writing habits. They all say, "Oh I did it this afternoon," or, "Oh, I'm finished. I'm going out." I'm the only person left who is this irresponsible. Now I call up friends during the day and they're writing. That never used to happen.

I also have several writing habits necessitated by living in this apartment. I have to take the TV off the chair. I have to move the lamp to the desk. I have to take all the junk off the desk and wash the desk. That's good for at least an hour of not writing. I'll also invent things, like I have to clean the entire apartment before I write. And now I eat a steak before I write, like a prizefighter.

"I think there should be an oldies TV station. My favorite show was 'The Modern Farmer'... how to plant tomatoes, raise chickens, can peas."

High Times: If someone offered you an hour TV special that you could do anything with, what would you do?

Lebowitz: I'd like to have a talk show with no guests. I'd just sit at a desk and talk. Or I would call people on the telephone and have their responses broadcast. I think Brigid Polk did that once. She rented a theater and sat on stage and called people up and didn't tell them. That's what I'd like to do. I'd call it "Hello, This is Fran."

High Times: Do you answer your fan mail?

Lebowitz: I have to say I have only written back to important people, people in the publishing business. The idea of writing something without publishing it is too horrifying to me. I never write anyone letters. One of my resolutions is that I am going to start answering my mail. Once I wrote a column for Interview called "Send This Girl to Camp" where I set myself up as some sort of fresh-air-fund child and announced that I wanted to go to camp; I invented a camp called "Camp Sensibility" and asked people for contributions to send me there. And people sent in money. But then I found out it was fraud or something and I could go to jail, so I sent the money back and wrote to the people who sent it to me.

High Times: Have you gotten any marriage proposals?

Lebowitz: I've gotten some marriage proposals, but I don't think they were serious. I've gotten lots of date proposals. Someone once told me they were sending me 14,000 roses and 12,000 Chinese concubines, but they never showed up.

High Times: What hours do you keep?

Lebowitz: I see no reason to get up before one o'clock except to watch "Family Feud." When it was on at 1:30 I saw no reason to get up in the morning, but now it's on at 11:30, so sometimes I wake up to watch it. I don't like to go out during the day—it's too crowded.

High Times: Do you watch anything else on TV besides "Family Feud"?

Lebowitz: I went through a period of watching "$20,000 Pyramid," but it was too frustrating because every day I won $20,000 and I have no money. I also went through a period of watching "Name That Tune."

Oh, now I remember my favorite TV show from my childhood. It was "The Modern Farmer." It was actually a show for farmers. I don't know why it played in Morristown, New Jersey. It went on at five-thirty or six in the morning. As a child I kept the opposite hours. "The Modern Farmer" came on *before* "Sunrise Semester," and it was *about* farming. One day they would show you how to plant tomatoes, the next day they'd show how to raise chickens, the day after that how to can peas.

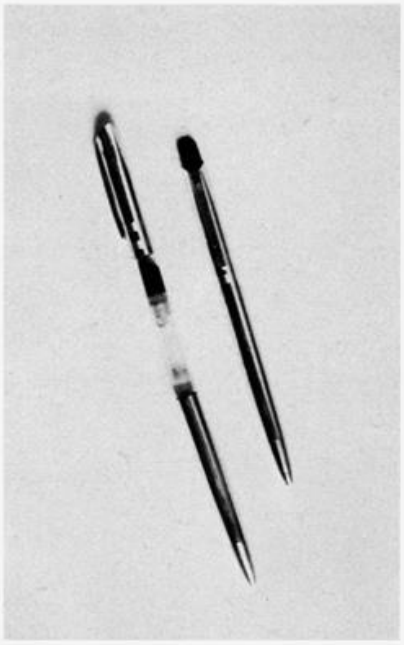
I was mesmerized by "The Modern Farmer." I used to sneak out of bed to watch it. I wish it was still on, except now I guess it would be too modern. I think there should be an oldies TV station like there's an oldies radio station, with "Dobie Gillis" and "Life of Riley" and all those great shows. Richard Robinson thinks there should be a TV station that's only the best commercials.

High Times: Did you ever have any pets?

Lebowitz: I had a parakeet when I was four called Polka Dotty, and I killed Polka Dotty by eating its food. Polka Dotty ate seeds and celery tops, and my mother would give me Polka Dotty's food, and I would go downstairs and eat it. I did not connect eating with staying alive, so I didn't think anything of eating the food. Then one day Polka Dotty was found dead. But my mother didn't tell me. One day I went downstairs to eat Polka Dotty's food, my mother told me that Polka Dotty had flown south for the winter.

I have two animal theories. One is that deers are rats. I once read that deer are in the rodent family, and I still believe this. The other is that horses are hands. Because someone once told me that horses legs are actually like fingers and that their hooves are actually fingernails. So I evolved the theory that horses are hands. But I really don't like animals at all. I would rather have a typist. ◘

This is the greatest thing to hit* SNOW.** ***It's like the roach clip is to grass.





"AMAZING NEW DESIGN PEN"

Carry and use anywhere, just unscrew pen and fill reservoir with your "powder." Holds 3/4 gram. Easy one hand operation. Just tilt for a perfectly measured spoon every time, and snort through convenient hole in top of pen. Locks when not in "use" for writing. No more bottles or making lines, or worrying.
"Powder is caught in the new revolutionary design cup which permits a perfectly measured amount every time".....
This is the real thing -
Order now for immediate delivery.
Only $14.95 Pen comes in beautiful Gold.
Check your local dealer. If he dosn't have it yet fill out mail order form.

MAIL ORDER FORM
TO ROCKY'S ENTERPRISES
Suite 1 Butler Bldg.
Viewmont Village
Scranton, Pa. 18508

Please send me.....Snow Mate(s) at $14.95 each. Total $.....Enclosed.
Name.....
Address.....
City.....
State.....Zip.....


The Nucle
NO NUKES!
PROTECT OUR CHILDREN
STOP SEA
CONSERVATION NOT



According to the figures, a nuclear catastrophe is inevitable every 17 years

by Harvey Wasserman

On October 8, 1957, a problem developed in the nuclear reactor at Windscale, on the English side of the Irish Sea. Through a bizarre chain of malfunctions and mistakes, some of the uranium in the plant's 1,500 fuel rods caught fire. Temperature gauges soon began slipping out of control, and radiation monitors at the top of the reactor's twin, square, 400-foot emission towers sent down the bad news—radioactive gases were escaping into the countryside.

Terrified plant managers knew they had a nightmare on their hands. After a special scanning device malfunctioned, two technicians donned bulky radiation suits and opened an inspection hole to look in. They saw the last thing they wanted to see—more than 100 fuel rods glowing bright red, with blue flames surrounding them.

Summoning six more heavily suit-

ed workmen, they began poking at the uranium pellets with long steel rods, trying to knock them free of the casings. It didn't work. Neither did blasts of carbon dioxide, shot in to suffocate the flames.

Throughout the eighth—a Thursday—westerly winds blew the radioactive gases out to the Irish Sea, contaminating fish and other marine life.

That night, the wind shifted to a southerly direction. The gases began poisoning farm land, farm animals and people. Gamma-ray readings at Seascale, a mile away, were by now abnormally high. But now plant technicians knew there was no chance of the fire running its course—they would have to take drastic measures.

Rumors of trouble leaked from the plant. Panic crept through the area. One scientist fled with his family to the south of England. "There was not a large amount of radioactivity released," came the official word. "There has been no injury to any person. There is no danger of the reactor's exploding."

The disclaimer was not all that reassuring. While it was being made, plant technicians debated the use of their last resort—dumping thousands of gallons of water into the reactor core to put out the fire.

Doing that would utterly destroy the multi-million-dollar machine. It would create several tons of extremely dangerous radioactive water. And, worst of all, it could cause a hydrogen explosion capable of ripping the reactor apart and shooting a murderous cloud of radioactive gases and particulates out into the atmosphere.

Meanwhile the fire burned on. Nearby police forces were put on alert for a possible attempt at mass evacuation.

Finally, the decision was made. On Friday morning a plant manager and a local fire chief dragged a fire hose up an 80-foot ladder to the top of the reactor. At 9 A.M., they turned the water on to a trickle. Technicians and firemen jumped behind steel barriers and held their breath. Live radioactive steam soared into the atmosphere, but there was no hydrogen explosion. Everyone at Windscale breathed a sigh of relief. Gradually, the fire hose was given full head. The Windscale Reactor was dead in a day.

So were some illusions about nuclear power. Official reports were contradictory. Some said the stack filters had prevented all but iodine gases from escaping. Others claimed radioactive particles could also get through, including strontium, cesium, plutonium and other carcinogenic killers. Even the iodine gases alone could provoke an epidemic of thyroid cancer among neighboring children; the other elements could inflict a sickening array of cancers, leukemias and birth defects that would carry through a hundred generations.

Official pronouncements continued to minimize the damage. But the government was forced to seize milk from more than 100 farms and soon spread the ban to a 200-square-mile area. Hundreds of cows, sheep and goats were confiscated, shot and buried. Thousands of gallons of milk were poured into the Irish Sea, where the fish got yet another dose. Farmers slaughtering their animals for meat were told to send the thyroid glands to the government for testing. Regular miners working in nearby coal shafts were replaced due to radioactive doses sent through ventilation systems.

And in London, 300 miles away, radiation meters jumped significantly.

Twenty years later—today—people in England and around the world are dying premature deaths from the radiation released at Windscale. The iodine gases and particles have translated into thyroid malfunctions and cancer in young adults who were children or even unborn fetuses at the time. The strontium has become bone cancer; the plutonium, lung cancer.

And Windscale was not alone. Accidents and close calls litter the history of nuclear power—NRX at Chalk River, Canada, in 1952 (where Jimmy Carter, then a naval engineer, got his year's dose in 89 seconds); NRU, also at Chalk River in 1958; SL-1 at Idaho Falls in 1961; Fermi I at Monroe, Michigan, in 1966; Browns Ferry in Alabama in 1975... they are just the best-known of the catastrophes.

Atomic reactors are part and parcel of a technological, financial and military elite; the ultimate in totalitarian energy.

Right now there are some 70 nuclear power reactors active around the U.S., with another 100 being built and with prospects of well over 500 world-wide. The Carter energy plan calls for something like 320 in the U.S. alone by 1990. At bare minimum it means an investment in the hundreds of billions, with General Electric, Westinghouse and a few others still harboring fantasies in the trillion-dollar ball park.

But what promises to be America's biggest social movement since Vietnam is rising up to stop it. The confrontation will soon be at center stage in the American political arena.

Without the atomic bomb there would have been no nuclear industry. During World War II, American scientists got a blank check to take warfare to still another level of insanity. But the Manhattan Project could not produce a bomb without special fissionable material—enriched uranium and the new element plutonium. To get them, atomic reactors were developed.

By the early '50s, as the bomb industry grew, the Atomic Energy Commission (AEC) found itself in charge of 65,000 construction workers, a growing bureaucracy, a very specialized product and an image to promote.

None of which had much to do with America's energy needs. In 1952, a special blue-ribbon panel told Harry Truman that there could be 15 million solar-heated homes in the U.S. by 1975. With oil and gas imports a bare fraction of what they are today, it seemed future growth in America might well be solar powered.

But the AEC had other ideas. In 1953, Dwight Eisenhower made his famous "Atoms for Peace" pitch to the United Nations. Coming in the midst of America's hydrogen bomb development, Ike plugged the AEC line that nukes would make electricity "too cheap to meter." This miraculous source of power, chimed the AEC, would keep America booming virtually forever.

But the utilities industry was unconvinced. The technology was new and unproven. It also looked dangerous as hell. A secret AEC report—kept from the public for a decade—predicted that a bad reactor accident was capable of killing at least 3,000 people and contaminating a land mass the size of Pennsylvania. Investment-conscious utilities decided to shop elsewhere.

But the AEC wasn't taking no for an answer. Build nukes, they said, or we'll do it and sell the juice ourselves.

Reluctantly, the utilities caved in. But they insisted on insurance. No private underwriters were willing, so in 1954 Congress granted the Price-Anderson Act, which limited liability from a reactor accident to $560 million, even though conservative estimates put the potential property damage in the billions. Price-Anderson assured the utilities that families and communities would be free to absorb dead homes and destroyed lives on their own.

But even at that, private insurers were only willing to take on $60 million in liability—so Price-Anderson allocated taxpayer money to cover the rest.

Thus protected, the utilities jumped in. With the nuke industry blaring about infinite power, the electric companies gleefully pumped demand by promoting such juice consumers as electric ranges, ovens, can openers and—the ultimate in utility marketing—the all-electric home. Architects continued to design skyscrapers and office buildings as if their sole desire was to waste as much electricity as possible. Industry never bothered itself with the niceties of conservation, recycling or mechanical efficiency. Fossil fuels were cheap, and nukes erased the burden of thinking anything would ever run out. They were the ultimate capital rush,

guaranteed to keep things tight, centralized and infinitely juiced.

But things haven't worked out. Plant breakdowns, inefficiencies, fuel costs, soaring capital costs and a wide range of unanswered financial questions have turned the atomic dream into an economic nightmare. The industry is a mess. Even G E and Westinghouse, the prime pushers, have lost money on their nuke business.

But the industry has a logic, momentum and crisis mentality all its own. As centralized, heavily capitalized energy, nukes are the ultimate guarantee that those in power will stay there. The reactors are part and parcel of a technological, financial and military elite. They are the ultimate in totalitarian energy.

Among other things, any real or imagined threat to a nuke could quickly erase all civil liberties. According to a report to the Nuclear Regulatory Commission (NRC) dated Halloween, 1975, theft of plutonium or a serious threat to blow up a reactor could prompt "area searches," the cordoning off of entire city blocks, detention without trial, and torture. Authored by Stanford University law professor John Barton, the report concludes that a plutonium economy would mean "continuous surveillance" that would "act at all times; it would not be restricted to emergency situations."

Reactor sites would become virtual armed camps (they already are). An expanded nuclear program would mean "a nationwide guard force, greater surveillance of dissenting political groups, area searches in the event of a loss of materials and creation of new barriers of secrecy around parts of the nuclear program."

Barton, remember, was writing *for* the NRC. Denis Hayes, a prosolar researcher, concludes more succinctly: "Commerical nuclear power is viable only under social conditions of absolute stability and predictability. Reliance upon nuclear power as the principal source of energy is probably possible only in a totalitarian state."

All that, of course, assumes we survive on the physical plane. There are those who have their doubts. The reactors have a few side effects the AEC never mentioned.

Like hot water. Excess core coolant has already destroyed countless thousands of fish at Plymouth, Massachusetts, in the Hudson River, Long Island Sound and elsewhere, and has unbalanced the ecology in some of our most important lakes and rivers. At Barnegat Bay, New Jersey, the Oyster Creek nuke has so fouled the waters that bizarre parasites called shipworms are devouring all the wooden piers and hulls in the bay. The industry line is that plant effluent should raise water temperature and create a new ecosystem; but in fact the reactors are shut so often that they flash hot and cold and only hardy creatures like shipworms can survive.

Mere physical construction work at Seabrook, New Hampshire, has resulted in the death of thousands of lobsters due to suffocation from silt runoff and a rare disease. A concrete factory at the site has virtually drained the local water table. And the insertion of outtake pipes at Diablo Canyon, California, killed hundreds of abalone even though the plant has yet to split its first atom.

Where plants are operating, specially treated steam emissions unbalance the weather and dump tons of chemicals into the winds and then onto the surrounding farm lands, making organic food a dream of the past.

But bad as all that might be, radiation is a whole other level of insanity.

"It takes one atom of radiation, one cell and one mutated gene to kill you," says Helen Caldicott, an Australian pediatrician now working in Boston and an expert on the health dangers of radiation. "If I die of lung cancer produced by plutonium, and if I'm cremated, the smoke goes out the chimney with the plutonium to be breathed into somebody else's lung, ad infinitum, for half a million years."

Dr. John Gofman, one of the world's leading nuclear chemists, a medical doctor and a veteran of the Manhattan Project, adds that "one pound of plutonium has been estimated to be worth nine billion human lung-cancer doses. One pound of plutonium loosed around the environment out of the 600,000 pounds that will have to be planned for each year would be a disastrous calamity."

At Barnegat Bay, the nuclear plant has so fouled the waters that bizarre mutant parasites are devouring all the wooden piers and hulls.

As one of America's top scientists, Gofman made discoveries without which nuclear-power reactors might not be possible. But he has become one of the leading foes of the industry. Plutonium, he says, will have to be stored "99.99 percent perfectly" for a thousand centuries. "Do you know," he demands, "or would you predict, that humans will do something 99.99 percent perfectly in peace and war, with human error and human malice, guerrilla activities, psychotics, malfunction of equipment—do you believe there's anything you'd like to guarantee will be done 99.99 percent perfectly for 100,000 years?"

That's not all. Aside from the plutonium, normal ray and particulate emissions from American nukes could be causing 32,000 abnormal deaths per year. Gofman arrived at that conclusion in the '60s, while working for the AEC. Higher-ups at the commission read the report and ordered Gofman and Dr. Arthur Tamplin, his coresearcher, to rewrite their conclusions. They wouldn't. Out they went.

Gofman and Tamplin then wrote a seminal book entitled *Poisoned Power* and joined the long list of some of the world's most prestigious scientists who've had funding cut off and jobs terminated for reaching the "wrong" conclusions about radiation.

Dr. Karl Z. Morgan, director of health physics at the mammoth Oak Ridge complex, had an important study confiscated and edited by the AEC because it showed radiation might be more dangerous than previously admitted. Dr. Rosalie Bertell of the Roswell Park Memorial Institute at Buffalo had her research funds cut off after being told the health effects of radiation were "irrelevant." Dr. Erwin Bross, also of Roswell Park, has studied cancer cases from the nearby West Valley facility and has also had his work and budgets assaulted from above.

None of which makes radiation any safer. According to Dr. Ernest Sternglass of the University of Pittsburgh, radiation levels downwind from the Millstone I & II reactors at Waterford, Connecticut, are comparable to those of the atmospheric-testing heydays of the early '60s. Sternglass became a key figure in the nuclear debate a decade ago, when the industry commissioned him to study the population around the Shippingport reactor, near Pittsburgh. When he correlated—in public—a direct relation between the reactor and local birth defects, the industry began a well-choreographed and very expensive campaign to ruin his reputation.

The campaign did not, however, prevent Sternglass's colleague, Dr. Thomas Mancuso, from discovering a high cancer rate among workers at the Hanford, Washington, nuclear facility. Nor did it keep Martha Drake, a health researcher, from learning that cancer, leukemia and birth-defect rates are substantially higher around America's four oldest nukes than they are elsewhere among the general population.

And what seems to be true of operating nukes also, amazingly enough, carries over to the mere mining of the uranium fuel. As it's dug out of the earth, uranium gives off radon gas, which cases cancer in miners (who have one of the highest cancer rates of any profession) and which may also vastly increase the background radiation everywhere. A recent suppressed government report came up with the following astounding conclusion:

> "Deaths in future generations due to cancer and genetic defects resulting from the radon from the uranium required for *one year* of reactor operation *can run into the hundreds.*" [emphasis added]

When the statistics became public, the government downplayed the conclusions. Dr. Walter Jordan of Oak Ridge, author of the report, admitted that previous emission estimates had been off by a factor of 100,000. But the error in terms of human health, he said, was "insignificant."

Unfortunately for the government, Congressman Clifford Allen (D-Tennessee) got hold of the report and, in essence, freaked out. If Jordan's figures were "anywhere at all near correct," he told the press, then "100 reactors operating for the next 25 years would cause 2,500,000 deaths" just from radon released in mining. Jordan's downplaying his own report, Allen charged, was "colored by the fact that it is he and his colleagues of the Nuclear Regulatory Commission who have advocated and approved the construction of more and more nuclear power plants."

And if mining is a problem, consider the other end of the cycle. The radioactive wastes that prompted the bomb industry to develop reactors in the first place are now a multi-billion-dollar horror show.

Nobody knows what to do with the stuff. They've tried salt mines, turning it into glass and even considered shooting it at the sun. All plans have been dismal failures.

And attempts to reprocess the wastes into reusable fuel have been even worse. In 1966, at West Valley, 30 miles south of Buffalo, Nuclear Fuel Services (NFS) opened a massive center for turning spent fuel into new reactor rods.

But the venture was so risky that NFS refused to move on it without extensive government guarantees (sound familiar?). Nelson Rockefeller, a major nuclear backer as well as owner of vast uranium reserves, happened to be governor of New York at the time. Rockefeller gave NFS a contract insuring that whenever they found West Valley unprofitable, they could just back right out and turn the damage over to the taxpayers.

Getty Oil intervened by buying the project, but the facility always leaked and never made money. So Getty availed itself of the Rocky option and left New York holding 600,000 gallons of high-level wastes. Current minimum estimate for the cleanup is $600 million, but that's on the optimistic side.

Because, among other things, the cleanup was almost not even a possibility. Because the plant was badly built, nitric

The Anti-Nuke Movement

The popular attempt to stop nuclear power has become a world-wide movement. Mass demonstrations and occupations against atomic reactors have already occurred in the U.S., Canada and Japan, with the biggest confrontations thus far occurring in Europe. A constant escalation is guaranteed until atomic construction is stopped.

Civil disobedience actions are, however, only the most visible part of the grass-roots antinuclear campaign. Electric utilities are now demanding very unpopular rate hikes to cover their nuke investments. Local groups have stepped up their door-to-door campaigns on that and related issues, especially where plants are being built nearby.

A world-wide network of local prosolar organizations has been building. Check the list and find one near you. It's a good chance to meet your neighbors and save your life. If you aren't already on the case, they can use your money and your natural energy.

New England

The Clamshell Alliance
62 Congress Street
Portsmouth, New Hampshire 03801
603-436-5414

Northeast

Eastern Federation
c/o Bob Alvarez/EPC
317 Pennsylvania Avenue SE
Washington, D.C. 20003

Long Island Safe Energy Coalition
c/o Mike Stamm
331 Terry Road
Smithtown, New York 11787

UPSET
Box 571
Canton, New York 13617

Wespac
100 Mamaroneck Avenue
White Plains, New York 10601

Ad Hoc Committee vs. Columbia Reactor
410 West 118 Street
New York, New York 10027

SEA Alliance
c/o New Jersey SANE
324 Bloomfield Avenue
Montclair, New Jersey 07042

Southeast

Carolinians for Safe Energy
P.O. Box 8165
Ashville, North Carolina 28884

Catfish Alliance
P.O. Box 6306
Dothan, Alabama 36301

Miami Peace Center
30005 Byrd Avenue
Coconut Grove, Florida 33133

Sunshine Alliance
P.O. Box 25007
Richmond, Virginia 23260

Palmetto Alliance
328 Whaley
Columbia, South Carolina

Oystershell Alliance
c/o John Maxwell
Whole Food Company
7700 Cohn
New Orleans, Louisiana 90118

Midwest

Ohioans for Utility Reform
Box 10006
Columbus, Ohio 43201

Detroit Safe Energy Coalition
c/o Al Lubawitz
691 Seward E-1
Detroit, Michigan 48202

Washtenaw FOE
P.O. Box 7828
Ann Arbor, Michigan 48107

Great Plains Alliance
c/o KCPEP
4311 Holmes
Kansas City, Missouri 64110

Paddlewheel Alliance
P.O. Box 194
New Albany, Indiana 47150

Northern Sun Alliance
Box 8794
Minneapolis, Minnesota 55408

Citizens for Safe Energy
Box 924
Claremore, Oklahoma 74107

West

Armadillo Coalition of Texas
4525 Bisbee
Fort Worth, Texas 76119

Citizens Against Nuclear Threats
106 Girard, Room 121C
Albuquerque, New Mexico 87106

Abalone Alliance
c/o People Generating Energy
Box 1598
San Luis Obispo, California 93406

Trojan Decommissioning Alliance
215 S.E. 9th
Portland, Oregon 97214

Crabshell Alliance
Box U-5395
Seattle, Washington 98105

Please note that this is only a partial listing of groups; the one nearest you might well know of one even nearer.

A national coalition focusing on disarmament and antinuclear campaigns is: Mobilization for Survival, 1213 Race Street, Philadelphia, Pennsylvania 19107. 215-563-1512.

acid in the wastes threatened to eat their way out of the containment vats. So technicians threw in some salts to neutralize the liquids.

The salts, however, precipitated out the wastes into a radioactive sludge at the bottom of the vats, which operators feared might go critical and levitate West Valley, Buffalo and a sizable chunk of Lake Erie to boot.

Two other shots at reprocessing have also been catastrophic. General Electric poured $65 million into a facility at Morris, Illinois, that never worked properly and closed very soon after it opened.

At Barnwell, South Carolina, a multinational consortium has sunk a quarter-billion into a giant waste-storage and reprocessing center they hoped would become the world's nuclear toilet. But they need another $750 million to finish it, and they want the Carter Administration to write a government check. So far, no dice.

Meanwhile spent fuel is piling up at commercial reactors, threatening at least 20 with shutdowns, others with blowups. The Vermont Yankee plant at Vernon, for example, recently won NRC approval to triple its waste-storage capacity. That means the company will stack three times as many spent rods into the same on-site swimming pool and will then shove in boron control rods to keep the place from spontaneously exploding. The swimming pool will then be more dangerous than the plant itself—and the plant itself recently dumped 83,000 gallons of radioactive tritium into the Connecticut River, was shut 17 times in its first 19 months of operation and has been cited by the Wall Street Journal as a "nuclear lemon."

Other disposal methods have been less complex and have already made a noticeable impact. Some of the 61,800 55-gallon drums of waste plopped into the Pacific Ocean off San Francisco Bay are now known to be leaking. The wastes included plutonium, which concentrates in fish. Weird giant sponges are growing nearby that seem to be cousins to those found off reactor sites in Japan.

Meanwhile both New York City and Chicago have moved to ban the mere transport of radioactive materials through their towns, and with good reason. The trucking of a glowing fuel rod following a 1950s Canadian reactor accident resulted in the entire highway being dug up and buried. Two years ago the wheels fell off a tractor-trailer hauling wastes down Route 91 in Massachusetts. At least one driver has been caught hauling radioactive materials while drunk.

The French, however, may have found the real answer—distributing the wastes around the countryside. Last year, residents of the tiny town of Medun were amazed to find a large cask with "Danger—Radiation" markings sitting in the middle of the town market. A call to the French AEC revealed that the cask was, indeed, high-level waste. Embarrassed officials assured townspeople that the cask's presence in the village square was not the beginning of a new disposal plan—just another triumph in nuclear technology. The cask had fallen off a truck. The driver hadn't noticed.

In this country, however, literally tons of high-level materials have been noticed "missing" from federal facilities. A Government Accounting Office report last year listed some 8,000 pounds of plutonium and high-grade uranium—enough to make 800 bombs—gone from storage. Industry spokespeople claim the lost material is lodged in piping and general mechanical diffusions around the plants. It's known, though, that at least 350 pounds of the stuff made its way to Israel. Plutonium sells for $10,000 a pound on the black market. Where the rest has gone, nobody knows—or at least, nobody is saying.

Through it all, the fear of a major catastrophe like the one at Windscale remains foremost in everyone's mind. And the industry knows it.

To combat this "unreasoning" uneasiness, the government spent $4 million on a study under the supervision of MIT physics professor Norman Rasmussen. Using complex probability techniques, Rasmussen reported that the odds on a major catastrophe were in the ball park of one in a billion. Reactors, Rasmussen said, were safer than walking across the street.

A nuclear melt-down is known as "The China Syndrome," because the molten core would go all the way through the planet.

The industry greeted the report with glee, and it got world-wide media play. Rasmussen took his place as a prime industry mouthpiece and now sits on the board of directors of Northeast Utilities, a Connecticut-based company with a heavy nuke investment.

But Rasmussen's study came under such sharp scientific attack that it has become a mainstay of the *anti*nuclear case. Although he characterized a nuclear accident as virtually impossible, computer analysis of Rasmussen's own figures indicate that a reactor catastrophe is *inevitable every 17 years* at least. And that's just from basic mechanical failures with a little human error thrown in. It hardly accounts for sabotage, "acts of God," airplane crashes, conventional warfare or even faulty construction, a factor which has prompted two mass reactor shutdowns (in September 1975 and January 1976) and at least one mass inspection (late 1977). Indeed, using Rasmussen's approach, one could have predicted in 1950 that none of the accidents that have occurred at Windscale, Chalk River, Browns Ferry or Fermi would ever happen.

For all this, however, reactors can't "blow up" as did the bombs at Hiroshima and Nagasaki. Instead, in a "maximum credible accident," the core would overheat, lose its coolant and "melt down" into an incredibly hot molten mass. It would then burn through the containment vessel and into the earth, most likely shooting off a steam cloud capable of blowing away the top of the reactor vessel as it went.

Melting into the earth is known in the profession as "the China syndrome" because theoretically the core would go all the way through the planet (in which case it would actually come out closer to Indonesia than China).

But in reality the core would blow an immense radioactive cloud through the earth's crust and into the atmosphere, one big enough to make Windscale's look like a minor mishap. The average nuke now contains thousands of times more radiation than the Hiroshima bomb. And all the benefits would revert to those downwind.

A major accident at Indian Point, some 20 miles north of New York City, could force a frantic evacuation of the city—not to mention much of New Jersey—within minutes or hours. "Thousands of people would die instantly," warns Caldicott. "Thousands more would die two weeks later of acute radiation illness, where their hair falls out, their skin falls off, they get vomiting and diarrhea and they die of infection because their red and white blood cells die. Five years later, there would be an epidemic of leukemia. Fifteen years later, epidemics of cancer."

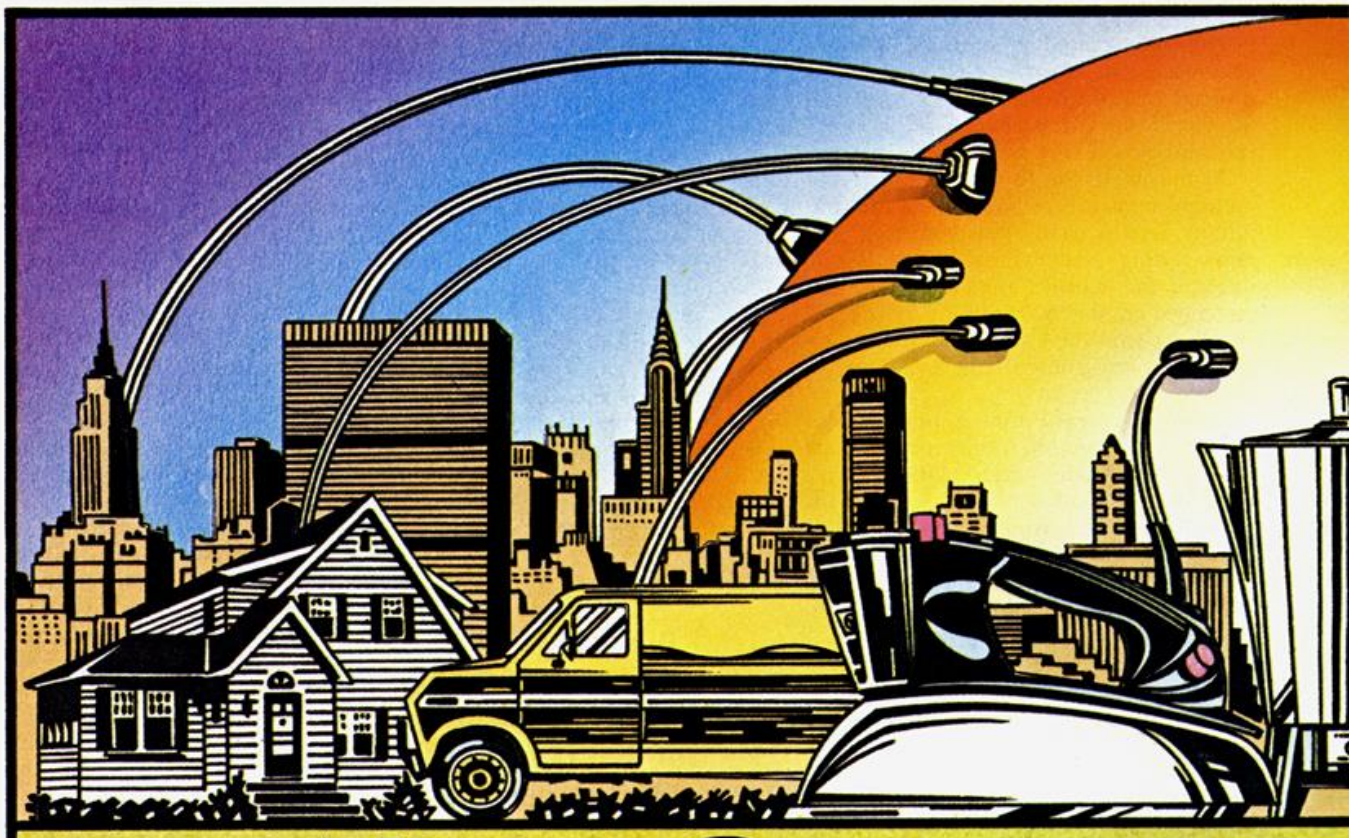
That image is a potential reality every minute of every day that nuclear power plants operate. Virtually every major city in the U.S. is within melt-down range of a planned or active plant.

The nukes are a political, economic and environmental catastrophe of the first order. And nothing the industry can offer justifies the radioactive risks being forced on all of us without a fair shot at public education, without a vote and with the very real possibility of wiping out what civil liberties we do have—along with a chunk of the odds on our continuing physical survival.

Solar-power conservation and recycling can fill all our energy needs. The corporations with nuclear commitments are standing in the way. The problem is political, not technological.

And the only thing really left to learn about nukes is how to clean up the mess, and how to stop the industry from building even a single new reactor.

Fortunately, millions of people are now on the march to do just that. ◘

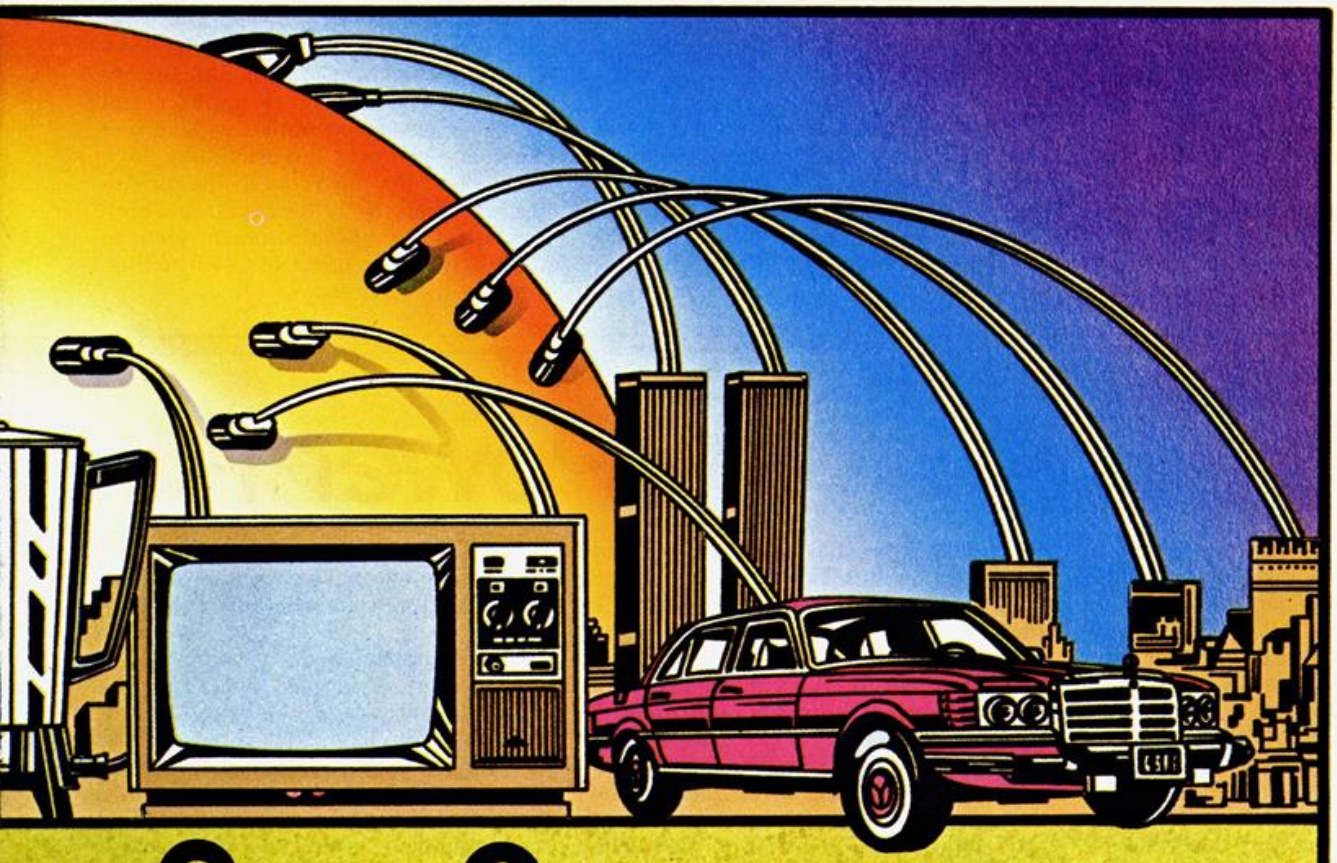


Who Owns th

The battle lines over solar power are still being joined, and the struggle is a confusing array of the weak and the powerful, of shifting alliances and contradictory objectives and, most importantly, of the swirling together of two quite distinct revolutions, one technical and the other political.

Is solar simply another energy technology, to be plugged into the existing network of multi-national energy companies? Or will solar provide a wedge that social activists can use to transform society, creating a world in which people control the forces that shape their lives?

There is little doubt that we are going to see a lot of solar, despite the foot dragging of the federal Department of Energy. (DOE has 1,700 people working on nuclear power in 1978 and 38 working on solar.) California has passed a 55-percent tax credit for solar



e Sun? It ain't you and me

by Dick Bell

equipment, and Jerry Brown has set a 1985 goal for solar homes in California equal in number to Jimmy Carter's goal for the whole country by that date.

The real question is no longer whether we're going to get solar, but what kind of solar it will be and who will control it.

Social theorist Amory Lovins has been the chief prophet of those who see solar as a way of decentralizing the energy business, taking energy out of the hands of the utilities and oil companies.

Lovins's landmark article in the October 1976 issue of Foreign Affairs, "The Road Not Taken," laid out the energy future as a choice between two paths. The hard path of nuclear, coal, shale oil and liquefied natural gas is capital intensive, centralized and vulnerable to catastrophic failure. Lovins argued that we could meet our energy needs equally well by using the renewable energy

flows from the sun combined with strict energy efficiency techniques.

Solar energy is decentralized to begin with. There are few economies of scale in collecting solar energy, so that many small collectors are just as efficient as a single large one. The dispersion of energy sources also reduces the capital cost and energy losses of centralized distribution systems like today's electric power grids.

Lovins's analysis points the way to an energy future in which fossil fuels and nuclear power will disappear as energy sources, replaced by an array of solar technologies: solar heating and cooling, solar thermal, biomass conversion and photovoltaics. These technologies could be deployed on a small scale, so that every community is largely energy independent, subsisting on the energy flows of its region. Utilities would exist, if at all, as a backup system, storing energy and releasing it when needed.

The solar struggle is two quite distinct revolutions, one technical and the other political.

The energy industry and the rest of corporate America, however, have no intention of turning the country over to the small-town, backyard solar pioneers. Responding with the ferocious flexibility for which capitalism is famous, major companies have moved swiftly to bend solar to their way of doing things. GE, Westinghouse, PPG, Owens Illinois, Corning Glass, Libbey-Owens-Ford, Gulf, Royal Dutch Shell, Exxon, Mobil, GM, ITT, Alcoa, Kennecott, Grumman, Martin Marietta, Boeing and Aerospace Corporation are all dabbling in solar, making consumer products and grabbing up patents and DOE research grants.

The oil companies have invested most of their money in photovoltaics, the semiconductors that turn sunlight directly into electricity. Photovoltaic electricity is still far too expensive to compete with current electricity sources. But according to a study done for the Federal Energy Administration last year, the cost would drop dramatically if the government were to place a five-year order for $400 million worth of the devices.



Power Pilfer

Power companies from coast to coast are reporting sad news to their stockholders: energy thieves are robbing millions from the corporate till. The basic simplicity of the average electrical supply system makes it an easy mark for inventive energy pilferers.

The prime area of attack is the electric meter. There is one in every residence or business that uses electricity. This mechanical fishbowl can be found gleaming piously at the back of almost every house or apartment building, deli or drugstore. To look at it straight on, it resembles a series of tiny clock faces. Below the faces swirls a tiny disc. The purpose of the meter is to record kilowatt hours of electricity. Kilowatts are to Con Ed what gallons are to Exxon. The more electrical appliances you operate, the more kilowatt hours you consume.

If you have just moved into a rental house or business, there may not be a meter. Only a gaping hole where one once was. If a building has been vacant for a long time, the electric companies usually remove the meter, which is equipped with a plug on the back. Without the meter, the flow of electricity is stopped, much as if there were a switch in the line. Of course, if you use a short piece of heavy, insulated wire, you can close the switch yourself, without removing the meter. The wire is simply wedged between the plug receptacles. If you are clever, you can replace the cardboard cover on the mounting block without opening up the box, and no one will be the wiser!

If you have moved into an apartment or a house that already has a meter, you still may not have electricity. The light company has another interesting practice. Instead of removing the meter when someone vacates, they open the meter and cover the plug tips. This covering is in the form of a plastic sleeve. It serves the same purpose that ordinary electrical tape would, blocking the flow of electricity. Lift away the meter and remove the sleeves, replace the meter, and there is light.

The sleeves could be left in place and then jumper wires installed, defeating the registration of the meter. There is also a tiny sliding piece of metal on the inside back of the meter. It is secured by a screw. This allows the meter to be tested for accuracy. By loosening the screw, the slide can be moved away, which also renders the meter inoperative, while still allowing electricity to flow. There are also speed controls on the meter face that can be adjusted. These controls, however, only affect the speed by one percent, which hardly warrants the trouble of opening the meter.

There is only one problem with meter tampering: discovery by the utility. All electric meters are equipped with a seal. The meter reader is attentive to broken seals and will call for a company repairer or investigator. Discovery may be delayed or avoided if the break is concealed by cutting below the plastic seal. In the case of woven wire and lead seals, it is possible to carefully cut a strand at a time in a different length and then carefully reweave it. Just how high is your electric bill?

It is not unusual for power-company officials to find a switch in the jumper wire. This switch allows customers to control how much electricity they are billed for, letting the meter operate for only one or two weeks a month. There are many rural electric companies that allow customers to read their own meter, which would naturally delay detection of meter tampering for a considerable period of time.

More complicated, but as common, is a technique involving the bypass of the meter. The way to do this is to attach a majority of the electrical load between the pole and the house, before it goes through the meter. This technique is hampered by the fact that most wiring is encased in steel conduits. But this covering is often slit at the back, near the structure, allowing the pirate access to the conductors.

It cannot be stressed enough that the techniques described here involve physical contact with high voltage. Many of the meters are equipped for 220-volt service. Unless you are reasonably familiar with electricity, you run the risk of being discovered by virtue of your charred remains still clinging to the mechanical fishbowl. In short, taking the tool kit from the trunk of your old VW and attacking the meter is not the way to foil the power company.

The electric meter resembles the scarecrow from *The Wizard of Oz*—it doesn't have a brain. It must be remembered that the meter reading is obtained by the amount of AC load on the circuit. Alternating current at 60 cycles accounts for the sum of commercially available electricity. Alternating current, simply defined, means that there is no real polarity. The battery in your automobile, on the other hand, is DC, or direct current; one side of the battery is represented as the positive (+), the other as negative (-) or, more commonly, ground.

Many accessories in your automobile depend on this polarity to function. Windshield-wiper motors, radios and

The large purchase would enable manufacturers to automate what is now an extremely labor-intensive process. And as the price began to drop new markets would open up, creating more demand, more automation, still lower prices and yet more demand, until in five years photovoltaics could compete with electricity produced by nuclear or fossil fuels.

Such a development would threaten the utility monopolies, since we could all become rooftop electricity producers, but it would do wonders for oil company profits.

According to a study done by the Center for Science in the Public Interest in Washington, D.C., of the 47 solar patents assigned since the mid 1960s, 30 went to big corporations. A study by the Citizens' Energy Project of fiscal year 1976 solar contracts showed that large companies received about five times more money than small businesses, $25,070,523 compared to $4,930,338. These same large companies, together with the utilities and the banks, also control the Solar Energy Research Institutes, the regional centers for solar research established by the Energy Research and Development Administration.

Major energy companies are dabbling in solar while grabbing patents and federal research grants.

The real differences in outlook become even more apparent when one looks at the kinds of projects DOE has been funding. In a series of articles in Science last year, Allen Hammond and William Metz concluded that DOE's solar research program has emphasized large central stations to produce solar electricity in some distant future and has largely ignored small solar devices for producing on-site power—an approach one critic has described as "creating solar technologies in the image of nuclear power."

Is this all part of some giant conspiracy to keep solar power out of our hands, or is it just the way monopoly capitalism works?

According to David Morris of the Institute for Local Self-Reliance in Washington, it's necessary to understand the

age by Robert Wilkinson



tape decks all have a specific path in their circuits for positive and negative current. The electricity actually flows in one direction, from one point to the other. Reverse this path and the radio will not function. The motor on your windshield wiper will very likely operate in reverse.

Alternating current, however, is a case of pulsed polarity. It oscillates between positive and negative (+-+-+-+-+-+-+-+) at the rate of 60 oscillations per second. With the installation of an electronic circuit between the meter and the load, the meter can be tricked into thinking there exists no AC load. This circuit, called a rectifier, converts the pulsing AC to DC. Surprisingly, many of the heavy users of electricity in a typical home or business can operate just fine on DC: incandescent lights, heaters and many motors. Stereos and televisions still need the AC.

A booming business for these altering devices has manifested itself in the major urban areas around the country. They generally reduce the meter reading by about 50 percent! So lucrative is the installation of these and similar devices that they have tweaked the interest of major organized-crime operators from coast to coast. The majority of the customers would seem to be small and medium businesses, who can barely survive the tremendous increases in electric rates.

Residential customers are also purchasing these clandestine meter foilers or building them from plans that are readily available through the classified sections in semiscientific magazines. The authors of the plans are quick to state that they are not encouraging anything illegal but only offering the schematics for academic digestion. Before you order a set and rush out to your hardware store for a roll of wire, remember that this line voltage can be *lethal*. "Academic" experiments should be done only with a healthy background in electricity.

Gas and water meters are also easy marks for energy thieves. Almost all gas and water meters are designed to measure the flow in one direction. Reverse the direction and the meter responds by running backward! You don't need a high-pressure tank disguised as a terrarium to accomplish this feat either. Simply turning off the supply at the cutoff before the meter is the first step. Then, with the use of a wrench, loosen the pipe fitting at the supply input of the meter. Make sure all excess water or gas has already been drained from the pipes in your pad: simply connect the blower side of an old vacuum cleaner to a convenient faucet and turn it on. There will be sufficient pressure to start rolling the meter backward. The air will escape from the loosened fitting on the meter. It should be noted that wrench marks on the meter, or a zero reading after six months, will no doubt arouse the interest of your meter reader. It should also be noted that gas has a nasty tendency to explode and that it is a relatively simple thing to flood your house if you don't have some experience in these handy areas.

All this tinkering is costing the utility companies a bundle. In most big cities the pilferage has caused the light companies to add special investigators to their staffs. Computers are also being programmed to "tilt" at the evidence of sudden decreases in the billings to customers.

Tampering with the meter outside usually will result in the company imposing a penalty to restore service. But if you have only occupied a house for a month or two, it is somewhat difficult for them to determine who the culprit really is. If the meter is damaged, chances are the price of a new one will be tacked on your bill. But in the case of long-term reduction in the billing via meter foiling, it may be a different matter. If the company suspects that you are stealing their product, they may attach a separate meter to your power or gas line. These surveillance meters are designed to detect surreptitious use of electricity or clandestine line interruptions.

Many utilities are undertaking actual criminal prosecution of energy thieves. By using their surveillance meters, or even educated guesses based on average load, they can put a dollar value on the juice you have drained. If it's high enough, your tampering could well be a felony. But even so, this new "alternative energy source" has company officials panic-stricken. The sheer numbers involved make detection and prosecution of violators an awesome and expensive proposition. There is work going on to develop a smarter meter, but the project is still in its infancy, and the cost of replacing all the old meters is astronomical.

If you think you would like to pursue the "academic" study of these techniques, you might want to drop a line to Mr. John J. Williams and Family, P.O. Box 542, Alamogordo, New Mexico 88310. John is an electrical engineer and part-time visionary. The engineering part of his personality has produced many interesting schematic designs for defeating gas, water and electric meters as well as pay phones, telephone-company billing devices and eavesdroppers!

big-solar mentality. Morris works to promote neighborhood self-sufficiency in food and energy and spends time talking with Washington bureaucrats and politicians. "I go in to one of these energy people and say 'Small businesses are the most innovative in the country, and they'll give you the best return for your dollars. Why don't you fund the small solar pioneers rather than these big companies?'

"They respond, if they're candid, 'Look, this small company is going to have to increase in size 10,000 times before it gets to be Sears or GE. If GE wants to go solar, there'll be solar in every community in the country next year. The big companies have got the franchises, they've got the distribution and the factories. We want solar to happen quickly. We don't want to futz around with small companies, except to the extent they do some good research and development work, in which case they will be bought out by the large companies.' "

Lee Johnson of Rain, an alternate technologies magazine, thinks corporations will have a hard time monopolizing solar heating. "I'm not too worried about who's building flat-plate collectors right now," Johnson says. "All these big companies with just a few plants on the coast are soon going to find that transportation costs are disadvantageous relative to local production. And these panels are so simple to build. There are so many do-it-yourself plans, and we've taught thousands of people how to build them in hands-on workshops. As energy costs continue to rise, local companies will become more competitive, or the big ones will have to decentralize."

Steve Baer of Zomeworks, the geodesic-dome company, takes Johnson's analysis one step further. Baer is the inventor of several ingenious and inexpensive solar devices, including the Drumwall, a heating system that uses a wall of recycled 55-gallon drums to collect and store the sun's heat. "If the big companies are buying up patents, they are probably not buying up very important patents," Baer says. "There really aren't many. There's just nothing in the way of people making good use of the sun. They can't blame their problems on some patent that's been purchased by Westinghouse or Dupont."

Both Johnson and Baer think that the success of passive solar systems will hurt the sales of active collectors. A passive system uses the design and siting of the building to collect, store and circulate heat, without the moving parts of an active system.

"The gadgetry tendency is a misdirection of resources," Johnson explains. "To build anything that uses active systems totally to heat a house is stupid. Passive systems cost one-half to one-third the price of active systems. The laws have been supporting a 'solar industry,' which means an industry making solar panels, when they could have been promoting architects and builders knowing about passive systems."

But the propaganda for active systems is still growing, and the utilities have begun to smell a way to profit from the enthusiasm for solar. Their proposals are meeting stiff opposition from those who feel the utilities have done enough harm already.

"Monopoly has gotten us where we are, it's not going to get us out, and it's not going to help us to further concentrate the means of supplying the energy in their hands," says David Norris of the Energy Task Force in New York. Norris helped plan the famous East 11th Street project that used sweat equity and government grants to restore a burned-out building, complete with solar hot water and a wind generator on the roof.

"The idea of Con Ed becoming the distributor of a given collector or installers or financiers of solar is a very disturbing one to the low-income communities where service has been so inefficient as well as so costly."

Critics say that the government's solar research program has emphasized large central stations in some distant future and has largely ignored small devices for on-site power.

The alternative proposed by the ETF is a community energy cooperative that would deal with energy issues on a variety of levels, from weather stripping to energy auditing to boiler maintenance and repair. And local energy cooperatives would be part of a federation that would be able to bring to bear some economic impact or to lobby against new Con Ed rate hikes.

Energy activists in California have seized on the idea of a public energy corporation and blown it up to California size in the SolarCal proposal. Sponsored by a coalition of community groups, labor unions and environmentalists, SolarCal calls for the establishment of a multi-billion-dollar public energy corporation to promote the solar industry in California, by lending money to consumer and small businesses, carrying out public education campaigns, certifying solar businesses and lobbying for solar energy.

Some alternative energy proponents would like to do away with the electric utility grid, scrapping the network of power lines that link the country's utilities together. Lee Johnson disagrees. "There was this tendency four or five years ago to become totally energy self-sufficient, to say fuck the rest of the country and go off and farm. But that doesn't work. Besides, that lets them keep it. That grid is *ours*. We're the ratepayers, we're paying up the ass for all that stuff. We want some say over how it's used, and the say we want is to be able to put solar and wind electricity back into the grid."

It's not at all clear whether people are ready to take over the grid or set up giant public solar utilities. But the enthusiasm for solar is still growing, and even labor unions have begun to recognize the job potential in a full solar program.

This enthusiasm is slowly making itself felt in official Washington, according to David Morris. "For the first time, you have some solar people, either by background or with a philosophical commitment, in DOE at the assistant-secretary level or below. And the Sun Day activities really kick 'em. They just don't know quite how to respond.

"But it's the states that really matter, especially California, which they're scared crap about. Jerry Brown is going to run for the presidency on solar energy. It's not a coincidence that DOE is talking about setting up an Office of Small Scale Technology or that Energy Secretary Schlesinger is asking what solar is, six months after California passed that 55-percent tax credit."

Recently, however, Congress has grown increasingly sympathetic to the problems of small solar businesses. Last year's 9-member solar coalition in Congress has ballooned to more than 60 members this year. When Carter, who said while campaigning that he favored alternate energy technologies and would only use nuclear as a last resort, shocked the solar industry this spring by introducing a budget for the next fiscal year that called for a *reduction* in the level of solar spending, Congress moved rapidly to increase the budget to more reasonable levels.

The coalition has introduced a wide variety of solar legislation, the most important of which would establish a federal solar fund of $5 billion to make low-cost (3 percent), longterm (up to 30 years) loans for buying solar equipment. Such a fund would give a tremendous boost to solar manufacturers, since commercial and savings banks have been reluctant to lend money for solar projects, much less on such terms.

It is still not clear what path the solar bandwagon will ultimately take. There are those who feel that the dangers of nuclear energy and liquified natural gas are so great that anything that can be done to accelerate the conversion to solar should be done. There is also a growing awareness that translating solar's potential for decentralization into reality may be a difficult political task.

Solar Do-It-Yourself

Do it now, before Exxon buys the rights to it

Once, all buildings were solar heated. Before coal, oil and gas were used for heat, designers of everything from the simplest hut to the most monumental palace had to take advantage of the solar facts of life to make the dwellings livable. The major entrances and windows were pointed south, with eaves of the correct slope and length to admit the winter sun but keep it out in the summer. Buildings were constructed as solidly as possible from stone, brick or heavy timber well sealed against the wind—all materials that absorb heat during the day to release it in the cool of the night. The priestesses of the temple of Vesta at Rome started their sacred fires by focusing sunlight on tinder with mirrors.

Solar energy has been pretty thoroughly ignored since the industrial revolution, although the Paris Exposition of 1878 featured a solar collector heating the boiler of a steam engine. The first modern attempt to heat houses with the sun was begun in 1939 with the model home built at MIT. By 1970 there were perhaps 25 solar homes in the U.S., and now that the era of cheap fossil fuels is definitely over, thousands will be in operation by the end of the decade.

There has never been any doubt about the feasibility of solar heat, only about its adaptability to American capitalism. As Sir George Porter put it, "If sunbeams were weapons of war we would have had solar energy centuries ago." The following pages were assembled to help you put the sun to work for you without waiting for the approaching mass-market era of solar energy.



Solar designer Greg Allen, whose motto is "No house is hopeless," recently directed the conversion of a drafty old Canadian farmhouse into a tight, self-sufficient building that gets most of its heat from the sun. This retrofitting plan puts the lie to the fable that solar heating doesn't work north of New Orleans; it is also saving owners Marilyn and Richard Hopkins about 600 gallons of fuel oil per year.

Dis Ole House Got Sol

Greg Allen and Dick Hopkins began by standing back and taking an imaginative look at the old house to see if it possessed any traits that would lend themselves to solar applications.

It seemed that the original carpenters had given some consideration to modern-day energy consciousness by placing four large windows on the south wall of the house, leaving only one facing north into the cold winter winds.

A large silver maple in front of the south side gives shade in the summer and then cooperatively sheds its leaves to allow the winter sun to fall upon the face of the house.

Said Allen: "The steep, south-facing tin roof seemed to be begging for a coat of black paint and a transparent covering. In short, the house's sharp gables made the perfect base for a low-priced, homegrown solar collector."

A three-step course was plotted, leading eventually to energy independence. Would-be retrofitters will find the three phases convenient in that each is self-contained and allows progress to come at a pace amenable to individual life-styles, inclinations and pocketbooks.

Phase One

There is no sense even contemplating the purchase of solar panels until your house is properly equipped to retain warmth. By insulating, adding weather stripping, caulking to prevent draughts and improving windows, energy consumption can be reduced by 30 to 50 percent. The simple, do-it-yourself steps that make up most of Phase One will begin paying for themselves immediately and will completely pay for themselves in about four years if fuel prices increase only 10 percent each year.

- On bright winter days a window serves to trap sunshine within the house,

The standard reaction of those unfamiliar with the new airtight stoves in a snug, well-insulated home: "Do you mean that little stove heats the whole place?"

but at night it acts as a radiator for all outdoors. The addition of heavy curtains to be drawn at night and on dark days will help insulate a major area of heat loss. The Hopkinses put their faith in curtains that reach the floor and are stabilized by sewing weights into the bottom. The heavier the draping material, the better its insulating value.

- Old homes are notorious for the condition of their window frames. Hopkins replaced his deteriorating frames with high-quality (if expensive) double-pane units from a builder's supply house. (A 2-foot-by-3-foot window with single-pane glass gives off heat at the same rate as a well-insulated wall 9 feet high and 20 feet long.)
- A caulking gun was purchased, and Hopkins and Allen were not stingy with butyl caulking as they attacked all windows and doorframes. Doors received weather stripping.
- Inside storm windows were installed. The retrofitters had a choice between a clear film such as Mylar (their choice) or less attractive plastic. In either case, the storm windows are placed inside where they are protected from wind and damaging ultraviolet rays (which are filtered out by window glass).
- Insulation is the most expensive step in Phase One, but a [Canadian] government rebate reduced the cost by $350. Because of time limitations imposed by a busy work schedule and an approaching cold season, Hopkins had a contractor blow in cellulose insulation—four inches in the walls and six inches in the attic. Hopkins could have saved $360 by leasing an insulation blower from a rental firm and doing the work himself.
- (Optional.) An exposed stone hearth and fireplace can mean much more than aesthetics. Rock makes an excellent storage medium for heat, and if the sun is able to strike a wall of rock within the house, warmth will be put in reserve to be released slowly during the evening.

Some owners of stone and masonry homes have reported good results by stripping the interior of a north wall that is struck by sun from south-facing windows (being certain, at the same time, that the *exterior* surface of the wall is well sealed and insulated).

Phase Two

- The standard reaction of those unfamiliar with the new airtight stoves when they enter a snug, well-insulated home goes something like this: "Do you mean that little stove heats the whole place?"

Long-burning wood stoves are becoming ever more feasible, and Hopkins selected a popular airtight that he felt fitted the size of the house and the family life-style. The stove was situated on the ground floor, as centrally as possible, so that heat would be dispersed to all corners of the house.

The problem of heat rising and building up in the higher reaches of the house will be solved when Hopkins carries out a plan to adapt the air ducts of the oil-heat system to circulate wood-heated air.

An air intake will be situated in the warmest part of the house (in this case, in the ceiling above the wood stove), and warm air will be returned to the furnace and forced back through the regular household ductwork.

A brick pad was laid down under the stove, and walls were constructed on two sides, both as fire protection and to help retain heat from the stove. Hopkins ordered their stove with a factory-installed, metal-tubing system that, when connected to a tank above the stove, provides a steady supply of hot water whenever the fire is burning. (Working on a natural thermosiphon principle, this wood-fired hot-water heater needs no pumps or mechanical gadgetry.)

- Greenhouses, as anyone who has ever worked in one can tell you, are able to collect great amounts of heat when the sun shines. Allen and Hopkins opted for a well-designed, permanent greenhouse. (Others might choose to erect a plastic-covered model for less money or to install double-glazed glass in a sun porch during the winter months.)

The Hopkinses' greenhouse will have a floor area of 160 square feet and will, of course, be constructed on a sunny southern corner of the house. The wooden frame will be covered with two layers of Tedlar film (a strong, transparent material often used in solar panels). Ducts will allow heat to be moved from the greenhouse into the house proper, but the two will be insulated from each other, so that too-hot summer temperatures can be avoided and the greenhouse can be shut down in coldest weather.

Phase Three

- While some argue that solar space heating has yet to become practical for northern areas, there can be no argument that solar domestic water-heating systems are ready to go. Many companies are now offering proven designs in the whole-package price range of $1,000 to $1,500.

With temperatures inside the operating panel cruising at 150 degrees Fahrenheit—and able to reach 350 degrees—there is no doubt that present-day panels can make water hot.

Hopkins's simple system will employ two flat-plate liquid collectors situated in a never-shady spot not far from the house. Buried tubing carries the heated fluid into the cellar, where it is circulated in an exchange unit in the water tank, thus transferring heat from the panel into usable hot water.

A system as basic as this can supply three-quarters of household water-heating needs and result in savings of more than $100 per year for the average family.

- The big move comes now, when the farmhouse roof is painted black and covered with a framework to support a transparent Tedlar covering. The roof has now become a built-in solar air heater.

The Hopkinses' basement, like that of many rural homes, contains a long-unused 1,000-gallon cistern. With some waterproofing and insulation, this will serve as a ready-made storage area for solar-heated water.

The forced air furnace will no longer be fired, but its fan will find service, blowing cold air from the basement up to the roof, where it will be heated as it crosses the black-painted 14-by-24-foot roof collector area. It is now returned to the basement and forced through a finned heat exchanger (in this case, a truck radiator). A separate flow of water from the cistern through the radiator is heated by this flow of air.

At night or on dark days, the process will work in reverse: hot water in the cistern will flow through the radiator, heating forced air that will be pushed throughout the house.

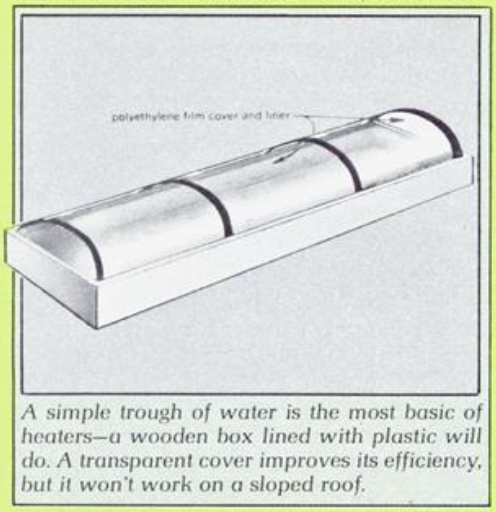
A temperature-differential thermostat with sensors on both the roof and in the cistern assures that no air is circulated across the panel when this would result in a heat loss (at night, during periods of extended cloud). All the equipment used is available off the shelf from plumbing or building suppliers and/or from many solar-hardware sources.

The Hopkinses estimate that the entire three phases of the plan will cost them close to $5,000. In return, they will have a house that is oblivious to the machinations of certain powerful Arab gentlemen and their counterparts in Alberta and Texas. There is, of course, more involvement required—pulling drapes, gathering firewood—but the deep sense of security felt at having an energy-assured future must go far toward repaying the modest investment of money and time.

From Harrowsmith, No. 10, Vol. II: 4, Camden House Publishing, Ltd., Camden East, Ontario, Canada K0K 1J0.

Solar Hot Water
by Michael Silverstein

Solar water heaters have been commercially manufactured and sold in this country since the 1920s. They achieved widespread distribution in Florida and the Southwest for several decades but lost favor in the 1940s when cheap oil and natural gas became readily available in most parts of the country. With the era of cheap fossil fuels over, however, the demand for this product is again proliferating rapidly.



A simple trough of water is the most basic of heaters—a wooden box lined with plastic will do. A transparent cover improves its efficiency, but it won't work on a sloped roof.

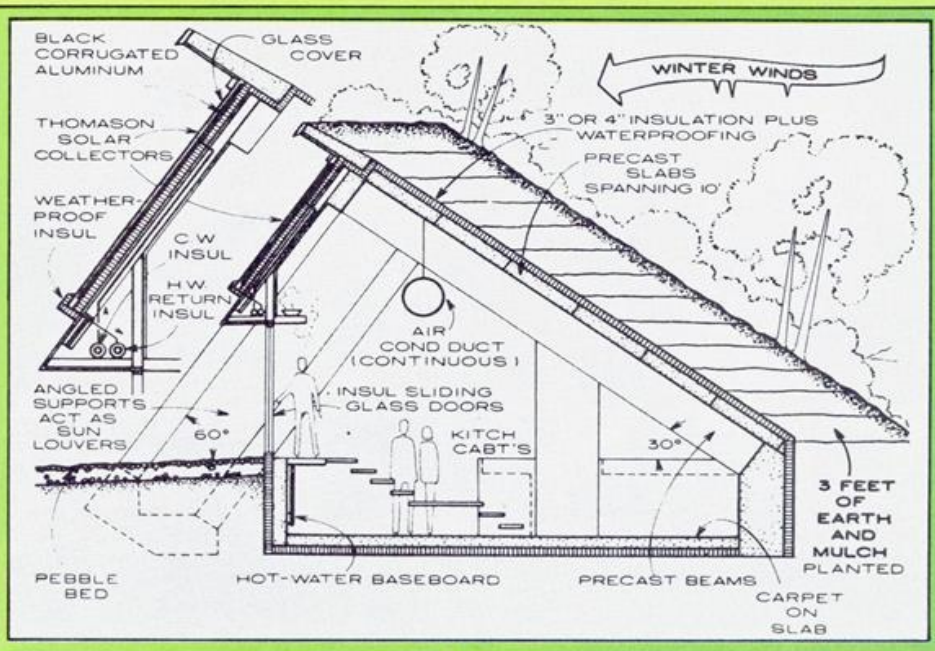
Materials and Efficiency

As in any solar heating system, there are three basic elements in a typical water-heating system: a flat-plate collector, usually fix-mounted and facing south, that can absorb solar radiation all year long; a circulation pump that sends a heating medium to a storage tank; and the tank itself, which may already be in place for an oil, natural gas or electric system and can be slightly modified when solar is added. In thermal-siphoning solar systems no circulation pump is necessary, but these systems are presently not very common in most parts of the country.

In general, the heat-collecting medium used in climates where freezing doesn't occur is water. This goes directly from the collector into the storage tank. Where freezing temperatures are common, the preferred medium is a nontoxic antifreeze solution. This must be pumped to a heat exchanger where its heat is transferred to the building's storage tank. Heat sensors and safety valves, which prevent excess pressures and temperatures from building up, are also features of most units.

Collectors

There are some general criteria one can use in evaluating a collector. Some expensive grades of glass used in collectors allow more sunlight in and keep more gathered heat from escaping. Two glass layers retain more heat than one, but also have a tendency to reject (reradiate) more sunlight. The translucent materials, various forms of plastics, used in some







A Solar Home You Can Build

Combine the efforts of architect Malcolm Wells, solar pioneer Harry Thomason, the mail-order company Edmund Scientific, and Bob and Nancy Homan, enthusiastic new solar-home owners: The result is an ecologically sound, practical solar-heated home that anyone can buy plans for and build.

Architect Wells is an advocate of architecture that has minimal site impact. The home he designed for the Homans is located on a gentle south slope, with a dense grove of pines to the north to shelter it from winter winds. The roof is covered with a layer of earth and mulch, planted with vegetation native to the area. This returns the site in part to its natural state, adds insulation and reduced rain runoff.

Thomason solar collectors run the length of the home's sloping, south-facing facade; water circulates from them to a tank buried in a rock storage bin. Air is blown through the rocks, picks up heat the rocks have absorbed from the tank and is ducted to the living area.

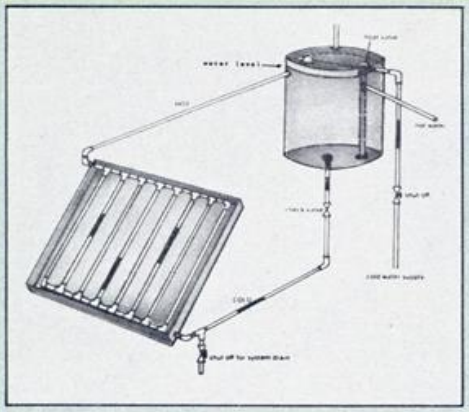
The Homans' house is divided into two areas: day activity (kitchen, dining and living rooms, studio) and night activity (bedrooms). The solar-heating system has two blowers, one for each zone, so that each can be heated to different temperatures.

"We're very pleased," Homan said. "We figure we're getting 85 percent of our heat from the Thomason system."

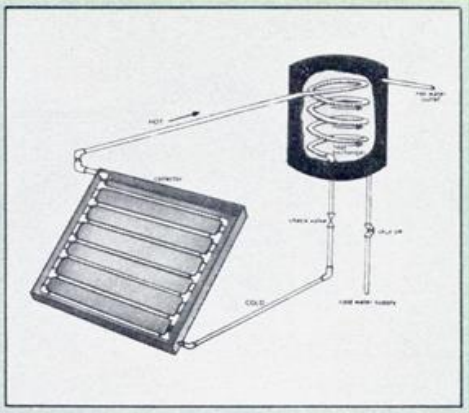
He adds that they've spent $60 on oil for backup heating—and that heating with oil alone has been estimated at $750. Even considering the extra expense for solar ($5,500 out of a total of $60,000 for the house), it adds up to impressive savings.

All this is great for the Homans, but how about the rest of us? That's where Edmund Scientific (700 Edscorp Bldg., Barrington, New Jersey 08007) comes in. They've published a book ($24.95) with detailed drawings your architect can work from. A license to build the house is $40.

Reprinted from Popular Science with permission © 1976 Times Mirror Magazines Inc.



Water-heating collectors have two basic patterns of circulation, either sinusoidal or parallel. Here, parallel pipes are arranged vertically. Cold water enters the bottom and is drawn off at the top. Valves control flow.



A water heater can also use freeze-proof fluids for transporting solar heat, by keeping them inside a closed loop. Heat is transferred to domestic water through coils inside the water storage tank.

less expensive collectors often have satisfactory solar admittance and retention qualities, but some can't stand up to very high temperatures and may be subject to thermal-expansion problems. Aluminum absorbers can corrode if the antifreeze medium they heat isn't blended very carefully, and for that reason aluminum is now generally out of favor in absorbers. A poor insulating layer under the absorber panel can lead to heat loss. All these considerations effect the efficiency of a collector.

Efficiency, however, is an engineering goal that has mixed appeal to a consumer. A typical buyer wants to pay only for the amount of efficiency that saves him or her money. If your collector gathers more heat than you need to heat your water, it may end up releasing it back into the air.

Usually, high-efficiency collectors are more desirable in very cold climates. Here they repay their higher initial costs in the extra usable heat they gather and retain.

Durability is of paramount importance in any solar system. Collectors are expensive front-end investments that justify their cost over a long period by saving on fossil fuel or electric bills. If they don't function properly for many years, they are rarely good investments.

The plumbing that goes with a collector in a solar water-heating system should be as well insulated as possible to lessen heat loss. This applies to valves, heat exchangers, and especially to storage tanks. In fact, it pays for the owner of any kind of water-heating system to make sure his or her storage tank is well insulated. There is almost always a savings to be realized here.

Installation

Making sure your system is correctly installed may be almost as important today as choosing the right system. In many places, traditional heating-system contractors have had little experience with solar units. Manufacturers are only now beginning to establish distribution networks, and your chance of being a contractor's first or second installation is still high. It may be wise to ask your dealer/contractor how many installations the company has made.

In fixed-mount installations (where the tilt of the collector is constant throughout the year) the actual angle with respect to the sun is less important than the snow-shedding ability of that angle in climates that get snow.

Proper sizing of the unit to be purchased is a basic element of any installation. A two-collector system may satisfy all the hot-water needs of a small family in Arizona—and have some heat left over for the family living room in winter. The same unit might supply only 60 percent of the hot-water requirements for a Massachusetts household.

The deep sense of security at having an energy-assured future goes far toward repaying the modest investment of money and time.

Additional Considerations

Consider the following points before making a purchase:

- Is insurance available for your solar system? The glass in collectors is susceptible to natural damage and vandalism. Solar use is so new in some states that insurance companies may not even have actuarial charts to base rates on. Some insurance companies, on the other hand, may include a solar installation as part of your present coverage at no additional charge.
- What sort of bank loans are available to finance your solar purchase? Spreading payments as part of a second mortgage, for example, may make sense for many people. See what arrangements your local supplier has with banks, and check your own.
- Before buying, make sure there are no problems with local building codes for your solar installation.
- Before even considering a solar unit, carefully examine the southern exposure of your home. Any major and some seemingly minor obstructions above the level of the installed unit could rule it out.
- The same collectors that gather heat for wash water can also provide heat for interior spaces. Even if you only want to go solar for domestic hot water at present, discuss with your supplier the possibilities of stepping up to space heating at a later date.

From *Solar Age Catalog*, Cheshire Books, Church Hill, Harrisville, New Hampshire 03450.

The Solar Greenhouse—Growing More for Less

by Bill Yanda

An observer may well ask: "Why all the interest in solar greenhouses? And, aren't all greenhouses solar?"

The answer to the second question is, technically, yes. In actuality, no. Conventional greenhouses are notorious solar-energy wasters, and the new emphasis is on the business of making greenhouses more thermally efficient. Research is advancing rapidly, particularly in applications to commercial greenhouses. Many families are also interested in using solar greenhouses as a means of offsetting their food expenditures.

The problem of designing the thermally efficient greenhouse is not one of applying standard solutions. As is true with solar water heaters, there are many designs, rather than just one or two, that could become the standards for the entire country. Every solution requires an examination of the climate and hours of sunlight available. There are also several other considerations:

- Crops to be grown—their needs for light, temperature and humidity;
- Operation and husbandry procedures—a commercial grower must get maximum productivity from growing space, whereas a homeowner may want an enjoyable living area as well as a growing area;
- Site availability—a perfect orientation is not always possible when adding a greenhouse onto an existing structure, nor can a grower with ten acres under glass move the facility 35 degrees in order to get maximum sunlight.

Efficient Greenhouses

Even though work in this area is just beginning, practical solutions do exist. At the risk of oversimplifying, I will try to present some of the features of thermally

(continued on page 113)

KING BONG

Reefer research has finally entered the space age. Getting high is no longer a wasteful adventure. Up till now countless tons of good dope have gone up in unused smoke: blazing joints have efficiency rates that would shame even Con Ed, and poorly engineered bongs release more airborne waste than Gary, Indiana. But dopers have always been eager to conserve energy, so while other industries are gripped in a power panic, a rare breed of American genius is toppling the last barriers between getting high wastefully and getting highly wasted!

We are proud to feature one such homegrown inventor on the following pages. Tom Furriskey of rural Pennsylvania follows in the bold tradition of Franklin, Ford, Edison, Fulton. His amazing Electro-Pneumatic Injector is the world's most efficient dope pipe. Built from salvaged brass and fitted with heavy-duty industrial gauges, the super pipe actually smokes the dope for you, then blasts premeasured hits of herb into awaiting lungs. Pot wizard Furriskey is seen factory-testing his marvelous invention with a potent batch of gold Colombian donated by a generous foundation...





George Moesel



ELECTRICITY

Inside the world's nervous system

by Glenn O'Brien

This is about vibes. My vibes and your vibes, but also *its* vibes. *It* is the power system, the world electro-network—millions of miles of hot wire carrying the juice to every corner of the globe.

The only time we talk about these vibes is when we get worried about them disappearing. We need that power. We need it to run our TVs, radios, washing machines, microwave ovens, air conditioners, stereos, lights, Christmas trees, razors, whirlpool baths, etc. What would we do without it?

But now things are looking bad. The fuel is running out, and everybody agrees that things just wouldn't be the same without the power. It's a big problem. We don't understand it. But that's because we didn't think too much about it in the first place. So maybe the thing to do now is to try and understand it. We should listen. Maybe it's talking to us.

The Big Picture

It was around long before us. Before anything. But it took us a while to get the picture. As usual, some of the smart people saw it coming. In 1851 Nathaniel Hawthorne laid out the plan in his heroic novel *The House of the Seven Gables:*

> Then there is electricity—the demon, the angel, the mighty physical power, the all-pervading intelligence.... Is it a fact—or have I dreamt it—that, by means of electricity, the world of matter has become a great nerve, vibrating thousands of miles in a breathless point of time? Rather, the round globe is a vast head, a brain, instinct with intelligence! Or, shall we say, it is itself a thought, nothing but thought, and no longer the substance which we deemed it?

It didn't even take much imagination to see that electrical systems would create a world nervous system. After all, electricity had been modeled on natural phenomenon—current discovered when Galvani's charged wire made a dead frog jump again. And by 1920 everybody had it. But the details would be left to science and imagination.

And so a totally new world was created with this electro-network. It was infinitely smaller. Communications that once took days or weeks now took minutes. And the forms of communication drastically altered the form and content of human communication.

This has been elaborately analyzed by Marshall McLuhan and his followers. The principal point of McLuhan's media vision is that "electric circuitry is an extension of the central nervous system," which is making the world a global village, moving toward a world culture. All that remains is for humankind to understand the system and our intelligence to control it.

And this seems like a pretty good idea. For even if one yearns for a simple, natural, harmonious existence, it is probably too late to turn the system off. It started as a novelty, but now we need it. Without the juice the cities don't work, the factories don't work, the farms don't work. Electricity is not only the key to a space-age future, it is essential for the maintenance of the complicated, super-populated world we're now living in.

But then again, there may be some other bugs here, bugs we haven't considered yet. There hasn't been much hard thought on the actual physiological effects of this massive electronic brain on our petite organic sense circuits. Do our brains adjust in mysterious ways to TV scanning patterns, telephone and radio frequencies or the 60 cycles of the alternating current surrounding us? This remains a mystery to science. The experiments are just beginning, and we, the first electrical people, are the test subjects.

Bad Vibes

We're starting to find out what will kill you. Leaky microwave ovens will do you in. Radioactivity can be hazardous to your health. But what about the myriad wavelengths along the vibratory spectrum? We've surrounded ourselves with vibes we don't know much about.

Recent studies have shown that one fact of life, fluorescent lighting, may be bad medicine. It can cause hyperactivity in children and has been shown to turn hamster cells cancerous.

Psychologists have determined that the electrically charged particles in the air, ions, have a great influence over human mood. Thunderstorms change moods, but so do the cities' electrical environments. The negative ions abounding in the subway have been scientifically determined to cause bad vibes, while the ions at the Plaza Hotel are much more conducive to good vibes.

But the most alarming research of late has been the result of farmers' outrage over high-tension lines, the big conduits that carry power from the rural plants to the cities. If you visit the big lines you can feel their effect. Underneath a 765-kilovolt line, the kind that powers New York, you notice that the hair on your body stands up. Your ears buzz. You feel light-headed. If you happen to be holding a fluorescent bulb it'll light right up.

The farmers who live along the lines have noticed plenty

Rock / Thormahalen

of other effects. They got shocks on their tractors. They get shocked on ladders and on the roof. The kids get shocked on swings. It can put you in a strange mood, and that goes for the cows, too.

As a result of the anti-line agitation in upstate New York, researchers at the Veteran's Administration Hospital in Syracuse conducted tests on the biological effects of electrical fields of the strength created by the high-tension lines. The hospital had been experimenting with these effects for some time and had discovered that certain electrical fields could stimulate healing in broken bones.

They found that fields of the strength generated by the lines did in fact alter organisms exposed to them. Animals experienced stunted growth, altered body and blood chemistry, cardiovascular mutation. Many of the symptoms induced closely resembled the classic symptoms of stress. Similar tests in the Soviet Union have led to the creation of new safety standards in the Soviet high-tension industry, drastically limiting workers' exposure to these fields.

Recently the Defense Department thought it had the solution to one of its most pressing problems: how to let our nuclear subs know when it was time to enter World War III. The idea was to build an antenna six feet underground covering 34,000 square kilometers (13,000 square miles) of northern Wisconsin, charged up with 14,000 volts. After residents on the planned antennaland became worried that all the juice might do something, the navy agreed to test out the idea. They found that the electrical field created by such an antenna, about one-thousandth of that which exists under a high-tension line, caused the development of mutant fruit flies, beagles with hypertension and other unpleasantries. The navy dropped the project fast.

But these megawatt-megavolt forcefields aren't the only concern. Now researchers are beginning to suspect that even weak little fields can kick psychic ass. Experiments at UCLA's Brain Research Institute have shown, among other things, that low-power, low-frequency fields cause monkeys to respond to stimuli at shorter intervals than they had been conditioned to respond at. In other words, the juice speeds 'em up. From this the researchers inferred that these common, everyday electrical influences could speed up the old human biological clock. (Could this be the key to punk rock? More on this later.)

By 1973 the same UCLA brain team discovered that some very high frequency fields—but weak ones—can directly influence brain waves. They found that they could sync kitty cats in with radio waves, actually "sharpening" brain waves and making brain-wave patterns last a lot longer than usual. These VHF waves are just like those that bring us "I Dream of Jeannie" and "The Munsters," but they were specifically tuned to the same frequency and amplitude as cat mentation. There's no real evidence yet that the radio-TV zap field we all live in is sharpening and prolonging our brain waves, but then again, why not?

The globe is a big magnet—and this charge is responsible for a lot of effects, some of which make life possible.

We have known about the earth's magnetic properties for eons. It has been widely suggested that there are magnetic power centers on the globe, and many of these were spiritual power centers where such features as pyramids and astrological timepieces were built. It is known that the ancient Druids mapped magnetic force lines and believed that certain sites possessed healing power.

Nikola Tesla, who perfected the use of alternating current, the induction motor and the electromagnetic generator, had a lot of even bigger ideas. One was to electrically illuminate the sky so that ships could see their way at night. Another was to control the earth's magnetic field. Tesla failed in both endeavors, but late one night, while listening in to the static on the planet's radio network, he thought he heard something strangely regular and intelligent. He came to be convinced that it was radio greetings from extraterrestrials.

Do our brains adjust to the TV scanning patterns, telephone and radio frequencies or the 60 cycles of the AC waves surrounding us?

Even though nobody had put much of an effort into seizing control of the earth's magnetic field since Tesla, in 1975 scientists at Stanford University found out we were doing it anyway. Radio experiments conducted from stations in Canada and Antarctica, near the magnetic poles, showed that the magnetic field was being considerably disturbed by concentrations of high-voltage transmission lines. But rather than expressing concern over messing with mother nature, the researchers revived Tesla's scheme, proposing that human control over this field could lead to improved radio and TV reception by counteracting the disturbances caused by solar flares and other cosmic events.

So welcome to the wonderful world of mutation. Mutant people inhabiting a mutant planet. The juice might have started as a novelty, but now it's dead serious. Again, it seems too late to stop it. We're totally wired. It's either learn to live with it or...or what?

The Man from Past

In 1973 David Walter McDermott, fresh out of college, hit New York City with great expectations. He had read about New York society, and now he wanted to enter. David had expected something out of Busby Berkeley—what he found was a lot of hard-working ambitious people spending their evenings watching TV and talking on the phone. So he decided to do something about it and create the kind of society he had dreamed about. With a group of college chums he founded Le Salon D'Art Societe. Installed in an Upper West Side brownstone, the group set about restoring the premises to a reasonable facsimile of its original decor—plush furniture, heavy draperies, ornate wallpaper and moldings, oil paintings, tea service, hat racks, umbrella stands, moose heads and candelabras with real candles. They walked the streets of New York dressed with style, the style of 1931. It wasn't easy. McDermott worked as a messenger for a meat-packing company, and often clients didn't understand his starched white collars, suspenders and straw hat.

Soon the Salon was socializing for dear life, holding lavish teas, balls and Sunday socials and inviting New York scene makers they hoped would be sympathetic. Many were, and the Salon gained a reputation bordering on notorious. But it was hard work, trying to bring back the past and holding jobs at the same time. So after a few brief seasons, the Salon was closed.

Its founder, however, didn't give up; he just moved on to the next phase. David decided to try country life and moved to the farm of a friend, Lawrence Broadmoor, who had been living in the past even longer than David. Broadmoor lived absolutely and authentically in the 1920s, supporting himself by selling and servicing player pianos. David found that country life agreed with him. It was easier to forget about the horrors of modern times. He didn't expect much more sympathy for his ideas in the country—modern farms are as technologically mutated as the city. But it was a good place to think.

David became more serious. He began to realize that progress had been a big mistake and that the only viable solution to world problems was self-conscious regression. Oddly enough he found a few sympathetic ears, and even allies, in the conservative countryside. Farmers were pissed off. And one of the big things they were pissed about was power. They had nuclear power plants in their backyards so that city folk could sit in hermetically sealed towers cooled to 68 degrees, punching keys on electric typewriters.

And not only did they have to worry about core meltdowns rendering the north 40 deadly for 10,000 years; there were also the power lines. The crime-ridden, smut-infested, heroin-addicted Big Apple needs

5,800,000,000 watts just to keep on keepin' on. And all that juice was up North, so the power planners drew some lines on the map from the power stations to the city, hundreds of miles of lines, and if there was a farm in the way it was soon traversed by high-tension lines carrying from 345,000 to 765,000 volts.

There was no way the farmer could win against the power companies' eminent domain. The power had to go through—and the shortest distance between two points is a straight line.

One night David was sitting up on a hill looking at the stars. It was so quiet you could hear the chirp of the crickets and the buzzing of the power line. The stars were even more beautiful to David because he knew that they were talking to him, transmitting information from the cosmos just as they had for millions of years, conferring on him their spiritual knowledge. But David realized that something was in the way. Something like the buzzing of the line. The human spirit was so much like the crystal radio, vibrating with the music of the distant spheres. And now these stellar broadcasts were being jammed by the enormous vibratory networks—networks that existed for such sublime acts as cooking a roast in two minutes with mystery rays, keeping innumerable carcasses frozen solid, opening cans with fewer finger movements. What stupidity. And besides that, the lines were so ugly.

The next day a large part of the surrounding countryside experienced a power blackout. Out on the highway in front of the farm was a huge mass of electrical wire. David left it there where it would be convenient for the power company to pick it up. He had no idea what a commotion his final act of restoring the farm to its 1920s condition would create.

David decided it was time to get back to New York, a much better place for becoming a world political leader. Now David is squatting in a beautifully designed yet condemned building in a more or less condemned Puerto Rican neighborhood on the Lower East Side. The building doesn't have electricity. "But," says David, "I don't miss it. I have my crank phonograph for music. I'm a vegetarian—I don't eat meat or milk or eggs so there's nothing to spoil. I'm getting a wireless radio. And light—how much light do you need? I never use it, except if I come home in the dark and want to get dressed or do something, but most of the time I'm out socializing. I like candles. They're very romantic and very inexpensive. Benjamin Franklin thought it was ridiculous that people would stay up hours and hours into the darkness of the night and yet there were hours and hours in the morning that were not even used. Society should gear itself to get up much earlier."

David gets up early and sets about his business. He doesn't have a job—he pays no rent, utilities, phone. Vegetables are cheap. David's business now entirely involves calling on people. He drops in on social calls, just like he used to. But now his conversation is extemely political and politically extreme. His politics resemble other radical ecologists, animal liberationists, anarchists and militant vegetarians, including solid logical arguments against "progress," but David takes it at least a step further. He sees the breakdown of modern society as a spiritual crusade.

"I believe electricity is psychologically harmful. I believe that the way our society is wrapped in wire is the same thing as when little children wrap a nail in wire and form an electromagnet. I believe that New York City and the country and the world at large are becoming an electromagnet. And I believe that this magnetic power is blocking out spiritual energy. I think we're losing contact with the information and the genius that comes from the universe. I believe that we're suffering. During the blackout it was obvious that people were not turned off, they were turned on. Suddenly for the first time people began acting the way people with common sense act. For example, all the Negro ladies uptown raided the supermarket like they've always wanted to do. They interviewed this lady on television and they said, 'How could you do this? How could you raid your own supermarket?' And she took this package of Pampers out of her bag and said, 'See these Pampers? They advertise Pampers, get your Pampers on television. Well I didn't have the money for Pampers. I got my Pampers now. I got enough Pampers to last me all year.' "

People living in urban environs have mutated as a result of exposure to electropower. TV babies are a new race with a higher level of energy.

After a stage of utter collapse and anarchy, David believes that an intelligent movement will arise to restore society to a sensible state. At first this state will resemble the early twentieth century.

"In the beginning part of this century the world was already built. Everything was here! All it needed was to be dusted, the brass to be polished, new canvas awnings every ten years. All it needed was to be maintained. The paving-block streets were here since the 1830s and 40s. But no! They had to rip them all up and put black tar down, black tar to absorb the heat. So we covered the world in tar."

Once future people get used to the near past, David suggests, we may prepare for even earlier and happier times. After a few hundred years of antidevelopment he sees a day when white Americans will get a hankering for Europe and blacks for Africa. "Okay, Indians!" David screams. "You've got it."

Jamming on the Astral Plane

David Walter McDermott is not the only would-be world prophet concerned about the electrical system blocking out the wisdom of the stars. Norman Mailer, a former candidate for mayor of New York, took up the issue in *Of a Fire on the Moon* (Little, Brown & Co., 1971), his report on NASA's man on the moon program.

For the astronauts, conquest of the moon was a job to do. For Mailer it was an enormously mystical act—elevating humankind to a divine or satanic level. He wasn't sure which. In fact he was mystified, for although enormously moved by this human accomplishment, he was equally awed by the awelessness of the men who performed it. This act of man made him think more about God.

> What now was the condition of God? Was He trapped in the wound of nature, severed from our existence as completely as the once exquisite balances of the shattered ecology? Had that vision He wished to carry across the universe depended altogether upon human mind and flesh in sensuous communication with nature? Had radio-by-machine been the cancer of communications?... What if some real exchange between insects, trees, crops, and grains, between animals and men, had lived with real if most distorted power in the first hours of history? What if that Vision of the Lord which had gone out to voyage among the stars had obtained the power to be carried up by the artwork of a bounteous earth exquisite in resonances of all psyches in its field? What if radio, technology, and the machine had smashed the most noble means of presenting the Vision to the Universe?

On every level, ecology studies the damage done by technology to nature, attempting to correct after the fact the consequences of myriad blind steps toward progress. But the question raised by Mailer is meta-ecology, a question so large that it challenges the notion of progress at its root.

Has our progress been our undoing? Specifically, has the creation of electronic media destroyed, or begun to destroy, vibratory mechanisms of the human mind of which we have no knowledge?

Of course astrology, or messages from the stars, are widely regarded as primitive superstition. But what about telepathy and psychic effects? Science has begun to take such matters seriously. How does the mind work? Can it transmit information like a radio, tuning into other minds on some kind of psychic radio band? We don't know.

There's no doubt these days that we are

made of vibrations, and already some of these have been mapped, so that ultra-modern California yogis can sit around measuring the fruits of their meditations on biofeedback machines, monitoring their alpha waves all the way to nirvana. Is higher consciousness merely a different set of waves?

If the electronic network does indeed cause interference with as yet unmapped levels of the psyche, might we not have actually constructed the mechanism of hell's fire? Maybe, huh? When the prophets and poets spoke of hellfire, what was it? For Milton, "A dungeon horrible, on all sides round, As one great furnace, flamed; yet from those flames No light, but rather darkness visible..."

The Man from Future

Kraftwerk is Germany's top pop group. They're not really what you'd call rockers. What they've done is to fuse rock, Afro-disco rhythms and hundreds of years of classical tradition with the electronic machine. They don't jump around the stage with guitars. They don't have guitars. Kraftwerk is machine music. But people love it. You can really dance to Kraftwerk, but the music isn't just moronic disco. It makes you think.

Kraftwerk means "power plant," and electrical power is what their music is all about. One of their songs is called "Radioactivity," and the boys sing "radioactivity....it's in the air for you and me." By radioactivity they mean not only gamma rays and the by-products of fission and fusion, but all of the electromagnetic effects of technoworld.

What Kraftwerk seems to be suggesting is that there may be some purpose to all of this. That the mutant electromagnetic fields we inhabit might do us some good. So I asked Kraftwerk if that's what they were getting at. But they went one better. "It's not a matter of us saying it's good or bad," says Ralf "Doktor" Hutter. "We are not into morality, but realism."

Electricity is here and we're going to have to learn to live with it. But, says Kraftwerk, the changes have already begun. They feel that people living in highly charged urban environs have already mutated as a result of exposure to the power. The TV babies are a new race, with a higher level of energy. Consequently Kraftwerk never goes to the country on vacation—the lack of artificial vibes tends to make them sick.

Kraftwerk's philosophy seems to be the only alternative to the kind of longing for anarchy and destruction of the system advanced by Mr. McDermott of Le Salon D'Art. They are futurists. They believe in progress. Electric power will change us, but if we learn to control it we can control our own mutation. "We have to adjust our brains to this world," they say. And they see music using the electromagnetic spectrum as a way of tuning us up to our new electrical environment.

Could this be the dark secret of rock and roll? Is there some obvious yet secret connection between the beat of electric music and the beat of the machine? Is rock the intelligence, the program that will enable us to live inside the supercharged electroworld?

Adults don't understand how the kids can stand all that noise, noise that medical experts assure us will make them deaf and daft. But maybe they are unable to understand it physiologically because it's the world of another vibration. Maybe the volume and electric power, the sound that makes every internal organ vibrate, is a way of harmonizing the body with urban electro-power.

Is heavy metal a saving grace? Long before the Marshall amp was invented, Antonin Artaud, the French visionary poet and actor, dreamed of a theater that would have the raw power now practiced as heavy metal rock and roll. In 1932 he wrote in the First Manifesto of the Theater of Cruelty:

Is rock the secret connection, the intelligence, the program that will let us live inside the supercharged electroworld?

> Musical Instruments: They will be treated as objects and as part of the set. Also, the need to act directly and profoundly upon the sensibility through the organs invites research, from the point of view of sound, into qualities and vibrations of absolutely new sounds, qualities which present-day musical instruments do not possess.... Research is also required, apart from music, into instruments and appliances, which, based upon special combinations or new alloys of metal, can attain a new range and compass, producing sounds or noises that are unbelievably piercing.

If Artaud had lived to see Iggy and the Stooges perform *Raw Power* 40 years after this writing, he would have no doubt felt like the real godfather of punk rock. But there wasn't any rock and roll for Artaud, and he got his dose of electricity from forced electroshock in the lunatic asylum.

The Big Picture Revisited

Like we said, they don't know just how it works. But it works. Scientists are pretty good at admitting it when they don't know something, but that doesn't stop them from bounding ahead.

But poets and philosophers and mystical types are often able to summon up quite a bit of certainty, challenging structures on painfully obvious, impossibly difficult levels. Gurdjieff, one of the boss mystics of the twentieth century and a great showman to boot, wasn't afraid to take on the problem of electricity and have fun at the same time.

Chapter 45 of G. I. Gurdjieff's colossal *Beelzebub's Tales to His Grandson* is entitled "In the opinion of Beelzebub, man's extraction of electricity from Nature, and its destruction during its use, is one of the chief causes of the shortening of the life of man." Gurdjieff's stories are presented as the tale of an interstellar traveler Beelzebub, who arrived in our solar system on the transspaceship Karnak in 1921, observing with bemusement and disgust the daffy doings on planet Earth. Among the most monstrous acts observed on the planet was "the destruction of the Ominpresent cosmic-substance Okidanokh." Beelzebub explained that what man calls electricity is "the result of the blending and the mutual destruction of two parts of this omnipresent substance." He noted that at various times in the history of this troublesome planet, man had succeeded in extracting various forms of energy from this cosmic substance for "naively egoistic" aims, and that never had the destruction been as great as during the current electrical age.

Gurdjieff doesn't give us the formula for Okidanokh, the mystery juice. But, as they used to say of McLuhan in the '60s, what if he's right?

The editor of Chemistry magazine, Theodor Benfey, has been thinking along lines that are similar, maybe wildly similar, but who knows?

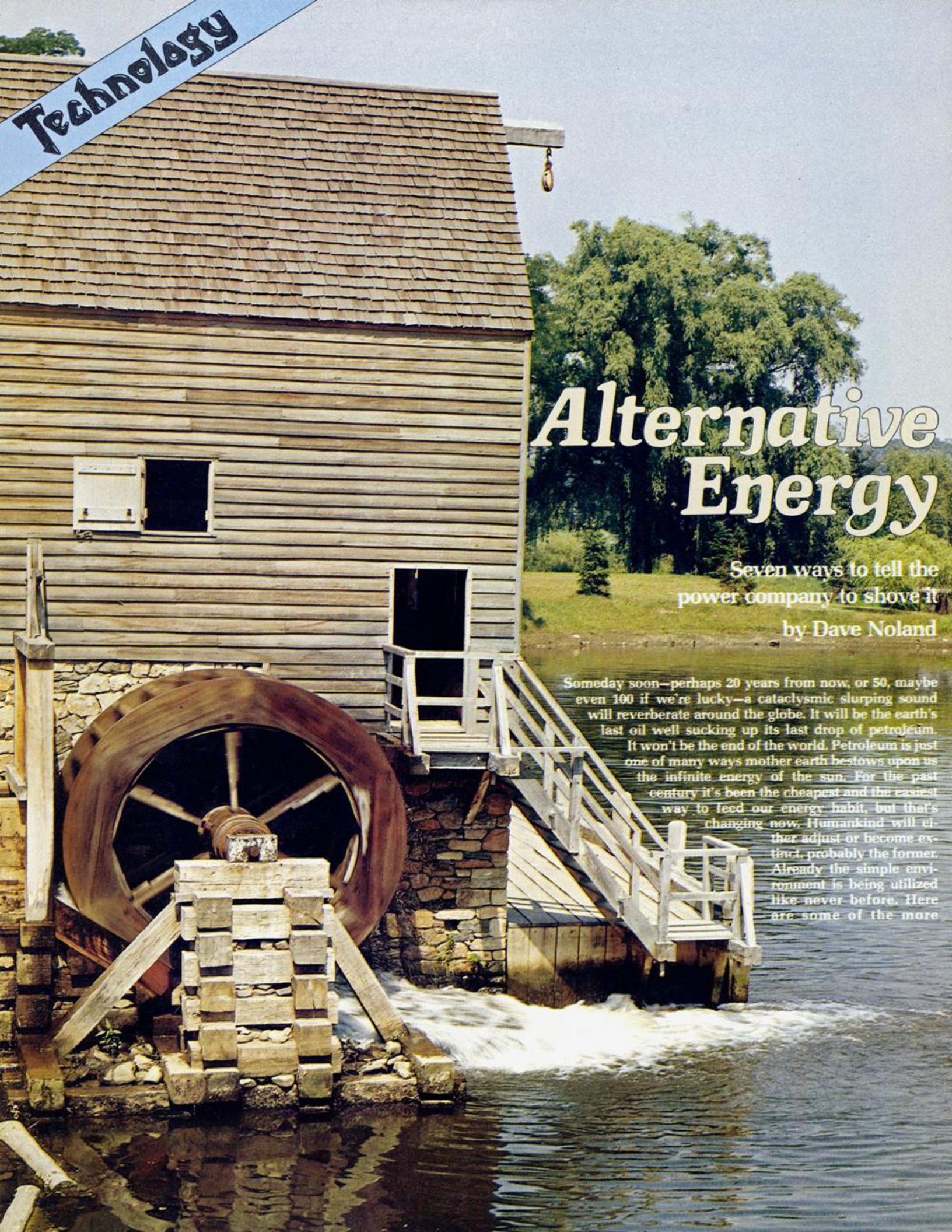
> Many years ago I started wondering what's so special about electricity. Why do all electric circuits seem to require metal wires? Are metals so unique? What are they but a lattice of positive ions through which negative particles can flow? Must stationary particles be positive and moving ones negative? And are electrons the only candidates for the moving role?

Physics has come up with some new toys called ion-exchange resins. These transmit the flow of particles other than electrons—protons, negative ions and other particles. The editor wonders, "Could we have protic circuits as well as electrical circuits—making the world a bit more symmetrical?"

It's promising when a scientist thinks about such grand symmetries. They could be the key to making the system work in a way that is not destructive to nature. Mr. Benfey is now eagerly anticipating the discovery of "generalized electricity," something which might even be good for us. He concludes, "I suspect we have protic or even more generalized currents zooming all through our bodies, yet there isn't a piece of metal inside us. [It is suggested] that ionic currents fed into us might produce all sorts of new sensations."

Maybe we won't have to head back to the dark ages after all, not if Okidanokh is right around the corner. But in the meantime, keep listening to your rock and roll station.

Technology

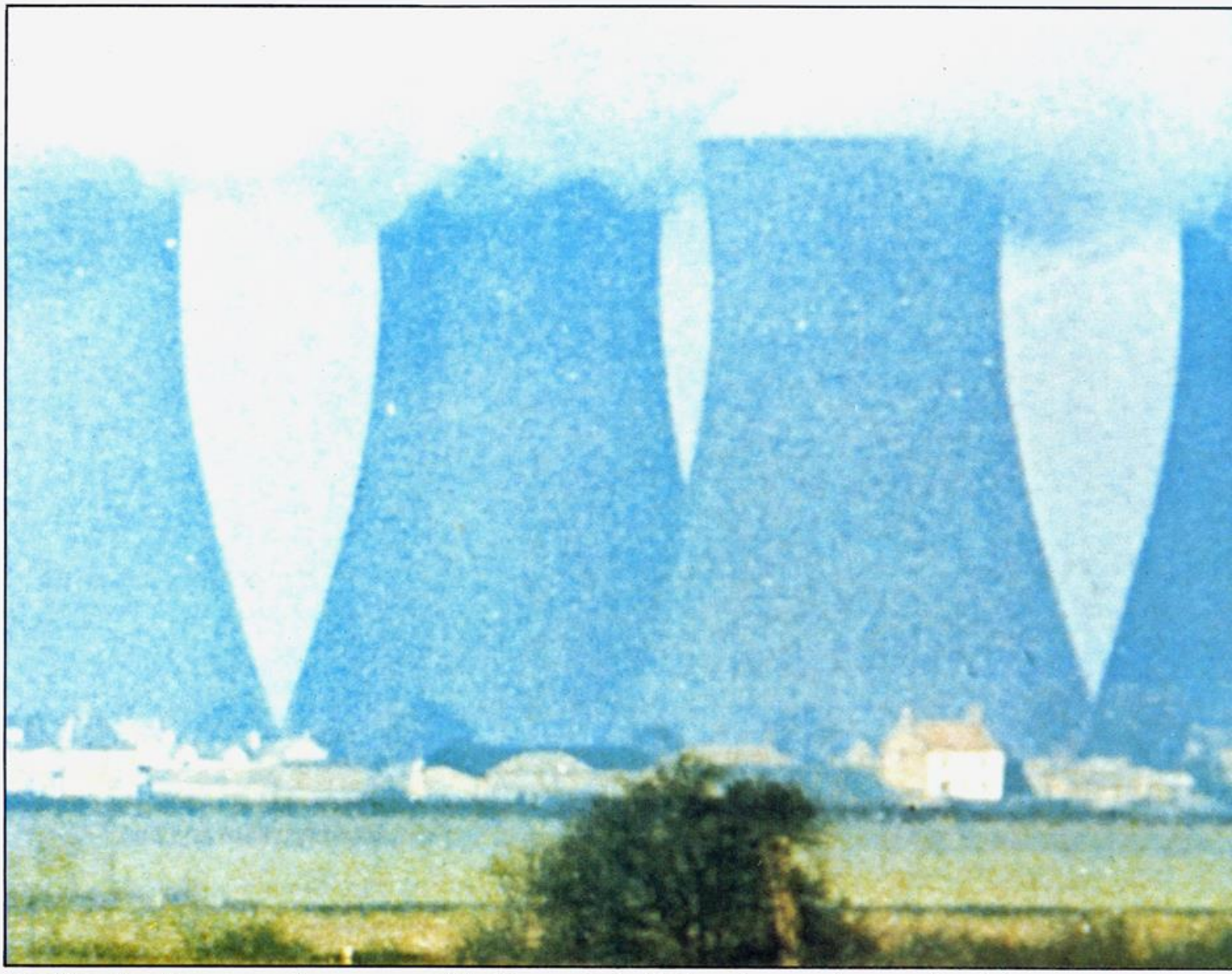


Alternative Energy

Seven ways to tell the power company to shove it

by Dave Noland

Someday soon—perhaps 20 years from now, or 50, maybe even 100 if we're lucky—a cataclysmic slurping sound will reverberate around the globe. It will be the earth's last oil well sucking up its last drop of petroleum. It won't be the end of the world. Petroleum is just one of many ways mother earth bestows upon us the infinite energy of the sun. For the past century it's been the cheapest and the easiest way to feed our energy habit, but that's changing now. Humankind will either adjust or become extinct, probably the former. Already the simple environment is being utilized like never before. Here are some of the more



promising alternative sources of energy under consideration for the day the oil runs out.

Solar Cells

The one alternative source of energy that may truly revolutionize the power structure of the globe is the photovoltaic solar cell, a wafer-thin chip of plastic or glass that converts sunlight directly into electricity—without turbines, without plumbing, without anything. Rays in here, juice out there—it's truly magical.

Solar cells are already being used in areas where it's difficult to string wires, places like outer space (many satellites run on solar cells). But the cost of solar cells is staggering, and they are used only in highly specialized applications where other power sources are impractical and money is no object.

But as researchers zero in on solar cells, the price has been dropping steadily. Five years ago, a solar cell cost $100 per watt of generating capacity; today the price is more like $10 per watt. By 1985 the price could go as low as 50¢ per watt—and then we'll be in business. For, you see, the cheap solar cell will have greater social consequences than any mechanical device since the automobile.

Here's what we mean: in case you hadn't noticed, you don't control your source of energy. If you displease Con Edison, Con Edison pulls your plug and it's tough shit for you. If Exxon and Mobil or some crazy Arabs decide to jack around with the price of oil, you wait in line for your gas—or maybe you stop driving altogether. The inexorable trend of the world is toward ever more centralized, more complex and more expensive sources of power, far beyond the understanding and control of the people who use the power.

But just imagine this: every home in America with an array of solar cells on the roof and a bank of batteries in the basement. All-electric homes stretch to the horizon, and every garage has a couple of electric cars plugged into the charger—all running on unlimited free power under the direct control of the user. No more would electric-power customers pay for transmission lines, meter readers, tree trimmers, TV ad campaigns, kickbacks to oil companies and all the other overhead of today's centralized, complex and bureaucratically encumbered power establishment. *You* decide how many cells you want and where to install them; you keep them clean and wipe them off after a snowstorm, and if there's a blackout or a brownout in your house, well, there's no one to blame but yourself.

An energy-independent middle class would deal a staggering blow to the Exxons and the Con Eds of the world, and the politicians who "regulate" them, and would certainly signal a major transfer of power in our society. Which sort of makes us wonder if the cheap solar cell will ever become a reality. Who is busily working away gobbling up all the government research grants for solar cells? Oh, the folks at companies like R.C.A. and General Electric.



Wide World

Wind Power

Readers from the Midwest are familiar with the ubiquitous windmills used by farmers to pump water for their stock. Over six million of these clean, nonpolluting power sources whirred away across America in the '30s, but the coming of the Rural Electrification Administration, fueled by cheap subsidized power from TVA dams, spread its wires across the land and made the windmills "obsolete." But our notion of progress has changed since then, and the few farmers who have kept their windmills turning are no longer labeled stubborn old reactionary cusses; they are now hailed as far-sighted energy pioneers.

Nor is wind power on a large scale a new idea. In 1941, a 1.25 megawatt (mw) wind generator was built on top of Grandpa's Knob, near Rutland, Vermont. With a blade diameter of 175 feet, it stood on top of a 110-foot tower. The Rutland plant operated until 1945, when a blade broke because of faulty maintenance. It could have been easily repaired, but the economics of that time didn't allow the wind plant to compete with cheap oil and coal, so it was shut down. Nowadays, of course, the economics of wind energy are improved, and research is being done into windmills of advanced design; i.e., the Darrieus rotor (a giant eggbeater), Savonius rotor and vortex generating towers.

A big drawback to wind power, of course, is the erratic and unpredictable nature of the wind. Less than a third of the U.S. has the steady 15-to-20-mph winds necessary for wind power to be practical. Nevetheless, in the productive Midwest and many coastal areas, wind power is an idea whose time has come—again.

The Synchronous Inverter

A marvelous electrical device called the synchronous inverter isn't really a *source* of energy, but it neatly solves the problems of energy storage for a home-sized family power plant. After all, what good is a superbly efficient windmill or solar cell on the roof if the sun don't shine and the wind don't blow? The traditional answer to these energy storage problems has been the heavy, bulky and expensive deep-cycle battery. But even a large bank of batteries wouldn't keep the average house going for more than a few sunless, windless days.

The synchronous inverter in effect hooks your little private power plant into the electric company's power grid. When your own power sources can't meet demand—say, when you turn on the electric oven and electric heat at the same time—the inverter simply draws enough power from the utility lines to make up the difference. When there's little or no demand on your home power plant, the inverter feeds your excess power back into the utility lines—and runs your electric meter backwards!

A handful of synchronous inverters are currently operating this way. In all cases, however, the power companies are buying the homemade power at wholesale



Muscle Power

Bobby Miller

by Ed Cobb

Ever since Hercules used muscle power to change the course of mighty rivers and clean out the stables of Augeas in a day, we have been preoccupied with harnessing the power of our bodies. The movement of muscles is a mechanical function stimulated by electrical energy and chemical reactions originating in the brain. We all have our own particular muscular tendencies, governed by whether we have slow-firing neurons, like those of a long-distance runner or a weight lifter, or fast-firing, like a sprinter or a boxer.

Individually and collectively we have continually surpassed ourselves in the development and use of our latent muscle power. From the personal feat of Milo of Crotona, who in 540 B.C. carried a one-ton ox 600 feet, to the incredible marshalling of strength it took to move 211,000,000 cubic yards of earth and rock to build the Panama Canal, we have performed great wonders. The Potala Palace, formerly the winter residence of the Dalai Lama, is another example of collective power. To do honor to their spiritual leader the people of Tibet, without benefit of modern construction technology, built the palace at Lhasa 11,800 feet above sea level. Measuring 1,200 feet long and standing more than 400 feet high, Potala Palace is mind boggling, truly one of the great feats of muscle power.

One of the most practical approaches to the use of muscle power on a personal basis is pedal power. Although widely ignored, its applications are legion. The average person, considered as an engine, is approximately 10–15 percent efficient; almost as good as an internal combustion engine. This is a comfort of sorts. A pedaling person can generate .1 horsepower on an extended basis and considerably more, up to one horsepower, in short bursts. Pedal power is a legitimate alternate power source for anything requiring a fractional horsepower drive. In Highland Park, Illinois, Sol Levine attached his television to a generator powered by a stationary bicycle in order to save energy and cut down on video addiction.

Pedal power could prove a boon to the small farmer as a means of running agricultural machinery. There already exist a corn mill and a diaphragm water pump used in irrigation, both run on muscle. Many pumps are wind powered, and a pedal system is an ideal backup for times when the wind is less than adequate. Although it will probably not be applicable to large plots—one imagines a scene of a hundred galley slaves pedaling furiously to the crack of a whip—there are plans for a prototype two-person winch. The winch will be able to efficiently plow a modest area and help small farmers to become less dependent on outside sources for the power to practice their craft. Their muscle power will suffice.

Perhaps the most romantic of the aspirations of muscle power is flight. The Gossamer Condor, an aluminum, cardboard and Mylar bird of mythic proportions, has accomplished the goal of human-powered flight. Paul MacCready, president of AeroVironment Inc., has surpassed Daedalus in building this bird, which has a 96-foot wingspan, weighs 70 pounds and requires but .35 horsepower to fly. The power is supplied by a bicycle pedaled by the pilot. The Condor in flying a prescribed course of 1.3 miles in 7 minutes 22.5 seconds won an $86,000 prize for human-powered flight offered under the auspices of the Royal Aeronautical Society. The prize had gone unclaimed since the 1950s, when it was instituted by industrialist Henry Kremer. MacCready is no longer working on the Gossamer Condor but believes that with more work the bird would require a scant .29 horsepower, which would allow someone in good shape to soar unaided for hours.

On an individual-achievement level, consider Arnold Schwarzenegger. After a workout schedule that was erratic at best during the several months he worked on *Stay Hungry* and then a full schedule for six weeks, hardly sufficient training by professional body-building standards, Schwarzenegger scored a convincing win in the Mr. Olympia competition. He attributes this ability to reach peak form so quickly to the relationship between his body and his mind. Rather than simply rely on mechanical repetition of lifts to build muscle, he claims to concentrate on the muscle itself and the process of muscle development at a molecular level. In this manner his mind and body are so closely aligned that the mind can aid in the body's work. He can almost will his muscles larger.

Ultimately, muscle power and mind power are inseparable. All feats of muscle share a common denominator, and whether we call it ki, soul, or whatever, it is the life force and our only limitation. Our muscle power can accomplish what we dare, what we will work for. The four-minute mark was the unassailable goal of milers, unassailable until Roger Bannister ran the four-minute mile in 3:59.4. The mental barrier had been broken, and the four-minute mile became commonplace. We now confront the unassailable goal of 3:30, with the record currently standing at John Walker's 3:49.4. Feats of muscle power, and by extension mind power, are only impossible until they are accomplished. Thereby they create new impossibilities to accomplish.

Another "unthinkable" feat is illustrated by this passage from *Gray's Anatomy*: "...In addition to these muscles, which are properly called voluntary, skeletal or striated muscles, there are other muscular tissues which are not under voluntary control, such as the cardiac muscle of the heart." Adam Smith in *Powers of the Mind* recounts an incident in which Swami Rama, under laboratory conditions, jumped his heartbeat from 70 beats a minute to 300 beats a minute in the space of 1 beat. Perhaps there are muscles not regularly under voluntary control, but there are none which cannot be.

Runners feel something akin to ecstasy after running. Weight lifters feel it too and call it "the pump." It is a high. It results from highly oxygenated blood caused by driving body and mind to their maximum effort, and it makes other highs higher. We feel what we feel through our senses. If our sensual perception is heightened, our view of reality will be intensified. The drive to make the most of muscle power is part of our basic desire to expand our consciousness. It is, finally, an effort to achieve what Hercules achieved by the successful completion of his 12 labors: immortality.

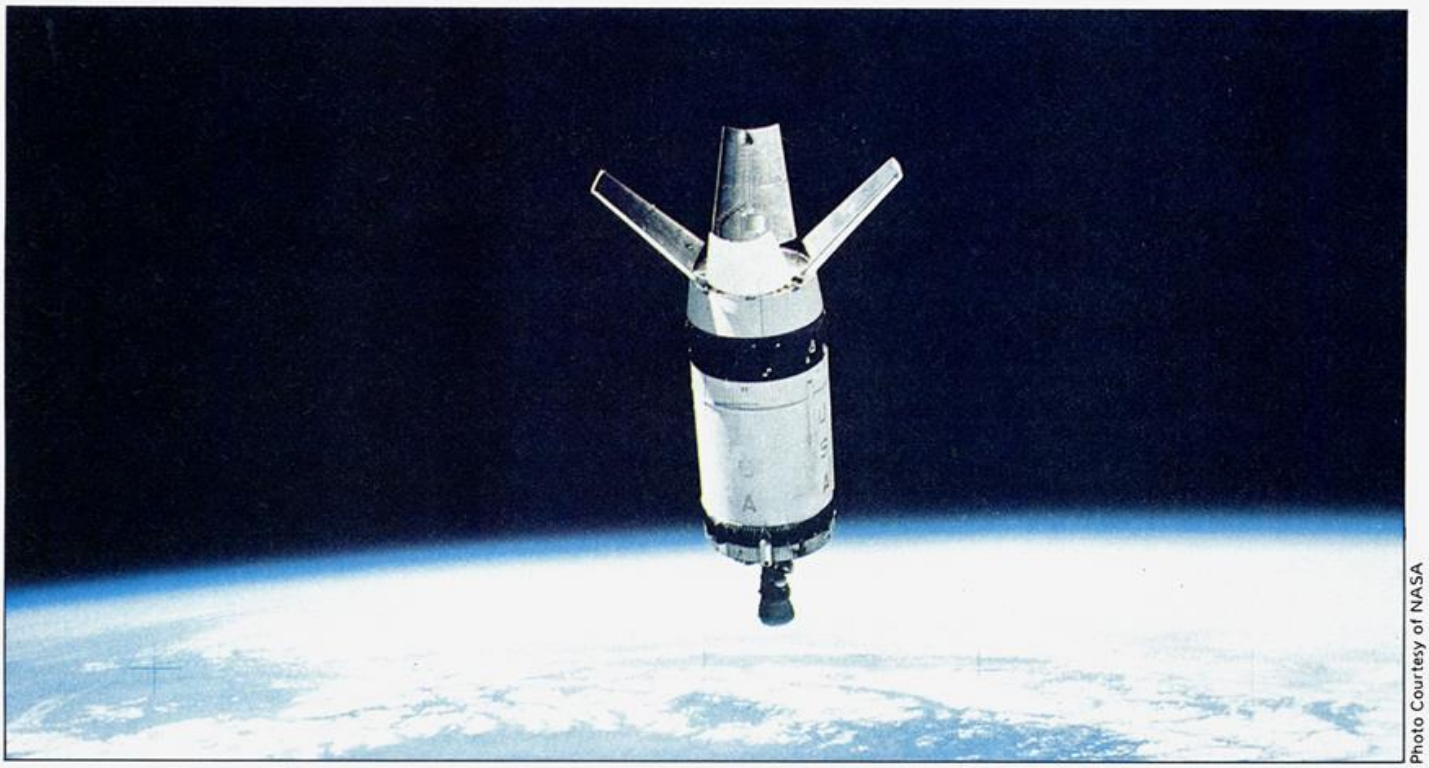


Photo Courtesy of NASA

prices, which means that to make a profit your solar cells or windmill would have to feed back two or three times as much power as you drew out. Nevertheless, it's still possible to make a profit—a windmill-powered co-op apartment in Manhattan recently ended up the month with Con Ed owing *them* a hefty 45¢.

The synchronous inverter offers the chance for a slow integration of private homemade decentralized power into the current established electrical grid. As more and more homes came "on line" with their own solar-cell plants, utility companies could gradually shut down nuclear and oil-fired power plants as they became obsolete. Ultimately, the Con Eds of the world might be operating only a few small plants to provide a cushion of reserve power to compensate for the vagaries of wind and sun and power demand patterns.

Solar Power Satellites (SPS)

If the solar cell on the roof is the ultimate in "soft" technology under direct control of the user, the opposite extreme—the ultimate centralized power source in the hands of a few technocrats—is the proposed Solar Power Satellite. The idea is that huge space stations—and we mean *huge*, a couple of miles across—would collect energy from the sun with solar cells, and then beam that power back to earth via microwave radiation to huge fields of receiving stations, which would then distribute the power through the existing grid. NASA will spend $20 million studying the feasibility of the SPS over the next three years.

Frankly, we're surprised that such a ludicrous notion has received serious consideration by our great leaders and all-knowing scientists (Werner Von Braun promoted the SPS). Not that the idea isn't feasible technically. But let's face it, to assemble a 200,000-ton satellite the size of Manhattan in outer space is a project of some magnitude (consider that it took a decade-long crash program and $20 billion to put two guys on the moon). Theoretically, the materials to build an SPS would be rocketed aloft by a monstrous reusable booster three times the size of the Saturn moon rocket and ten times the size of the NASA space shuttle now being developed. NASA predicts it would take 500 launches of these massive jumbo shuttles to build one SPS.

An energy-independent middle class would deal a staggering blow to the Exxons and Con Eds and signal a major transfer of power in our society.

And just how much energy would we get from this SPS after a couple of decades of intense effort and hundreds of billions of dollars? Oh, about five million kilowatts, or roughly one percent of the country's energy needs in the year 2000. Not even enough to light up Houston. And when the energy used up in manufacturing and operating the huge fleet of shuttle rockets is subtracted out of the energy equation, the net energy contribution of a Solar Power Satellite would be virtually insignificant. We could accomplish the same net energy gain by outlawing frost-free refrigerators and pilot lights in gas stoves.

We would also like to point out the possible dangers of microwave transmissions back to earth. SPS backers insist that the microwave radiation level on the ground will be "well within the international safety standards of 10 megawatts per square centimeter (cm)." Remember the U.S. embassy in Moscow, which was zapped with microwaves from a Russian transmitter across the street? Several embassy employees suffered nausea and headaches, and the former U.S. ambassador to Russia later came down with leukemia after exposure to microwave radiation levels well below the international safety standard of 10 mw per cm^2. The Russians, for one, think the 10 mw standard is hogwash and have set their own safety standards at 1 mw. There is a growing body of evidence to suggest they may be right.

All in all, the SPS is a fanciful boondoggle, much like those promises we used to hear back in the '50s of computer-controlled cars that followed wires under the highway while the occupants played chess.

Ocean Thermal Power

It is a convenient fact of life that the temperature of the ocean is about 40 to 45 degrees way down deep and 70 to 75 degrees on the surface (in tropical regions, at least). This fact provides a wonderful opportunity for the generation of totally clean and inexhaustible energy.

It works like this: if you have a gas that boils at, say, 60 degrees (pressurized pro-

pane or ammonia, for example), simply pump the stuff through a pipe a couple of thousand feet down in the ocean, where it is cooled to 40 degrees and condenses into a liquid. Then pump it back up to the surface, and as soon as the warmer seawater heats it up to 60 degrees—shazam!—we have propane or ammonia "steam" under high pressure, ready to shoot through a turbine and spin a generator. Once the gas passes through the turbine, it is pumped back down to be cooled off and recondensed—and the cycle begins anew. This process is called the Rankine heat cycle, and it is the basis for most electrical power generation today. The usual oil- or coal-fired power plant uses water as its working fluid and gulps fuel at a horrendous rate, heating the fluid to boiling point. An ocean thermal energy conversion (OTEC) plant has the distinct advantage of using the ocean's natural warmth to generate "steam" for its generator turbines.

Detailed studies of ocean thermal stations (by Lockheed, among others) show them to be fairly cheap and technically feasible right now. (A French scientist, in fact, built a small OTEC near Cuba back in 1930.) A proposal for an ocean thermal station to supply Miami envisions two 600-foot-long submarinelike hulls floating just below the surface with tentaclelike circulating pipes hanging 1,100 feet below the surface to bring up cold water for the condensers. The plant would then ship the power ashore by underwater cable. No reason it couldn't work just fine.

Biomass Fuels

The trendy-sounding word *biomass* covers a broad range of energy alternatives, but it all boils down to getting energy from plants and animals. Actually, petroleum itself is a form of biomass-derived energy, but the problem with petroleum is that it takes a couple of hundred million years to make it. The biomass energy sources described here are, in effect, easily and endlessly renewable "instant petroleum."

• A California chemist has proposed growing oil instead of drilling for it. A plant called *Euphorbia lathyrus* just oozes a latexlike hydrocarbon compound that can be refined into gasoline and heating fuels just like petroleum. It's estimated that an acre of the plants could provide ten barrels of oil per year at a cost of $20 per barrel (present cost of Middle East crude is $13.50). At that yield it would take 700 million acres of the weed to supply this country's habit (that's about a million square miles, or a quarter of all the land in the country). But scientific breeding could increase the yield per acre by a factor of ten—in which case all of America's petroleum needs could be satisfied by merely converting seven percent of the land presently used for grazing to cultivation of the oil weed.

• Alcohol fuel can be extracted from a wide variety of plants, ranging from rotten corn to sugarcane to cattails. Brazil has got one hell of a biomass fuel program underway. The wily Latins are refining sugarcane into alcohol and then mixing it with gasoline. The state of Nebraska currently operates its state highway department trucks on a "gasahol" mixture created from corn waste.

• "Garbage in, garbage out" is a cliche of the computer biz, but "garbage in, fuel out" has become the phrase that pays for a growing number of American cities and towns. Ames, Iowa, for example, has been refining 100 tons of garbage a day into fuel that provides 14 percent of the fuel needs of the local power plant. St. Louis and Madison, Wisconsin, also have refuse-derived fuel programs going. Other cities burn garbage and use the heat to generate steam. Not as sophisticated as refining it, perhaps, but it's still better than dumping it into landfill. And there's still energy in garbage even *after* its become landfill. Pacific Gas Electric is now operating 18 methane gas wells drilled into garbage landfill in Mountain View, California. The yield: 600,000 cubic feet of gas per day, all generated by rotting garbage under the ground.

The farmers who have kept windmills are no longer labeled stubborn old reactionary cusses; they are now hailed as far-sighted energy pioneers.

A Texan named Lyle Atkins has pushed the energy-from-garbage principle to its most sophisticated extreme. In a refinerylike garbage "cracking" plant, he puts dreck in one end and gets out from the other end sulfur-free "sweet" crude oil, kerosene, gasoline, light alcohol and pipeline-quality methane.

• Methane gas can be generated from cow shit—and most other kinds of manure, too. An enterprising South African pig farmer named L. John Fry generated 6,000 cubic feet of gas a day for six years from his pig manure. Sadly, the average family doesn't shit enough to produce such methane (it would take the daily droppings of 250 cows to supply the average family's energy needs), but all animal feedlots could immediately become energy self-sufficient, make a tidy profit selling excess methane—and solve a major pollution problem downwind.

• Incidentally, the human digestive tract produces methane in some abundance. If you don't believe it, try the time-honored collegiate gambit of fart lighting. You'll be astonished to discover that this bit of youthful folklore is no myth—in fact, a billowing flame shooting out of one's rectum is a vivid reminder of how alternative sources of energy turn up in the most unexpected places.

• Vast tracts of floating kelp beds could provide millions of tons of biomass for conversion to alcohol, methane or other fuels. According to some estimates, kelp could supply 25 trillion cubic .feet of natural gas—as much as the U.S. uses right now. General Electric and the American Gas Association are working on that one, but it's up to the rest of us to make sure they grow new kelp and plankton for energy, rather than just using it up, since it is the foundation of the ocean's entire food chain.

• Scientists at the Argonne National Laboratory in Chicago are working on an "artificial leaf" that can produce electricity or chemical energy from sunlight through photosynthesis—the basic energy-conversion process used by all plants.

• Wood stoves are currently surging in popularity in New England and the Midwest. Over 40 percent of all the houses in the state of Vermont have installed wood-burning stoves in the past three years. The latest super-efficient airtight stoves like the Fisher and the Defiant can totally heat a good-sized house on as little as three or four cords of wood per winter. In heavily forested areas like New England and the Northwest, there's no reason power plants couldn't burn wood instead of Arab oil. Most lumber mills today burn their waste wood to generate heat and electricity.

Fusion Power

In the mind of energy gluttons everywhere burns the desperate hope that fusion power will someday emerge as the ultimate inexhaustible energy source that will save our asses just in the nick of time. How does water sound as a cheap, inexhaustible fuel? In a fusion plant, hydrogen atoms from water are fused together under unimaginable heat and pressure to form helium, releasing huge quantities of energy in the process—the very same process that goes on inside the sun and, incidentally, inside a hydrogen bomb. In effect, a fusion plant is a controlled H-bomb.

Only one trouble with fusion power, though. Nobody's been able to stick those pesky little atoms together under controlled conditions yet. Oh, the scientists say they are closing in on it, and through some combination of cryogenic magnetic fields and plasma gas they may carry it off in the lab in the next ten years or so. But the price of an operational fusion plant is bound to be astronomical, and unfortunately fusion plants will suffer the same environmental problems of cooling and radiation that have virtually killed further expansion of nuclear fission plants. ◘

The Secret of Pyramid Power

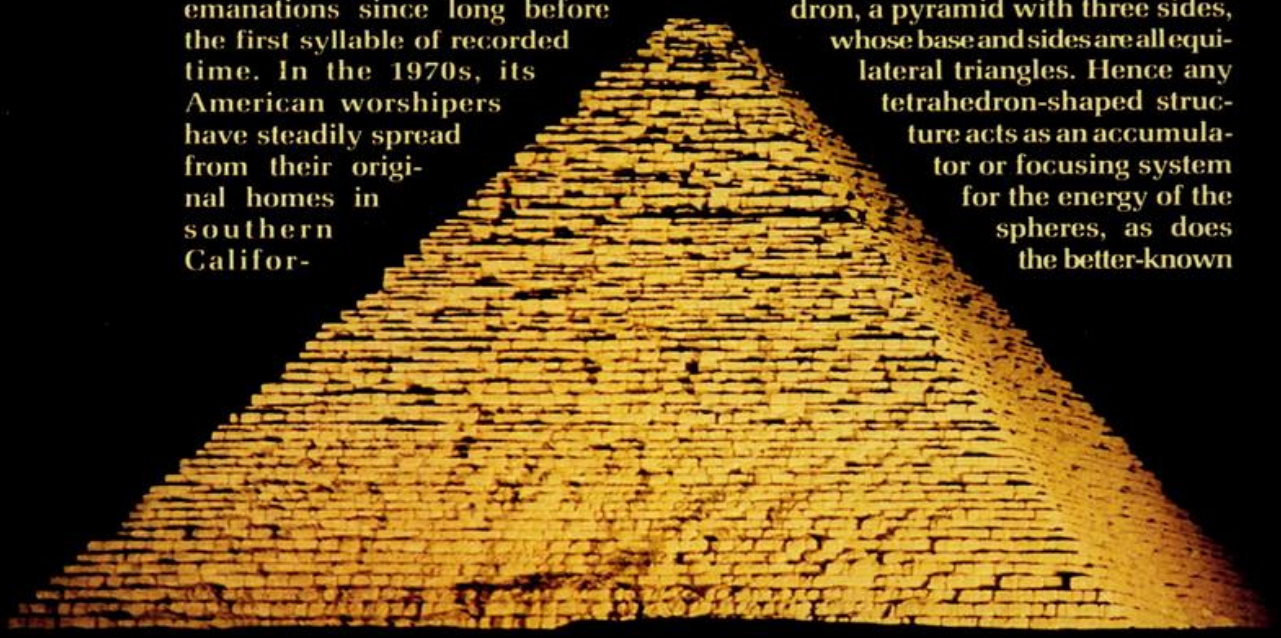
"Man fears time, but time fears the pyramids"—*Egyptian proverb*

by Gary Stimeling

Like the curse of the mummy's tomb, the mysteries of the pyramids refuse to die. As if in a funhouse mirror they proliferate endlessly every time the *true* solution is announced. And among pyramids, none is more elusive or omnipresent than the Great Pyramid of Giza. If everything attributed to it is real, this 12-billion-pound monster is literally God, a limestone cowboy galloping through trillions of words of speculation and controlling human destiny by its awesome emanations since long before the first syllable of recorded time. In the 1970s, its American worshipers have steadily spread from their original homes in southern California, Arizona and New Mexico.

Now, from my New York office, engulfed in many a quaint and curious volume of forgotten lore, with a pointy replica of the thing on my head just like the faithful, I hereby propose the Unified Pyramidal Theory of Life, Energy, History and the Universe:

In the beginning was the Pyramid. The Pyramid was with God, and the Pyramid was God. The etheric flux that underlies all outward forms of matter and energy takes the shape of a tetrahedron, a pyramid with three sides, whose base and sides are all equilateral triangles. Hence any tetrahedron-shaped structure acts as an accumulator or focusing system for the energy of the spheres, as does the better-known



Pete Turner

square-base pyramid if it is properly aligned with the earth's magnetic field. Such an instrument not only performs a thousand and one useful household tasks—like sharpening razor blades, stimulating droopy plants, energizing water and mummifying bits of sirloin—it also relieves headaches, rejuvenates the body, cures insomnia and releases latent psychic and creative powers.

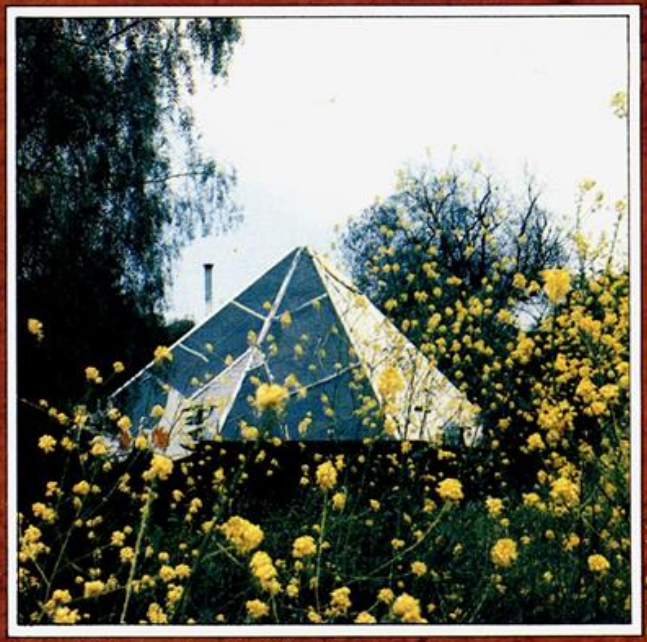
The ancient Egyptians knew all this, of course; otherwise why would they have bothered to pile up all those rocks? They built the Great Pyramid as a multipurpose bioplasmic energy generator and encoded their arcane knowledge in a geometrical allegory immune to the vicissitudes of conquest and language.

Their artificial mountain served as a sundial showing the hour and the day. In the winter when the sun is low, the shadow was measured against a scale north of the pyramid; the high summer sun was reflected from the polished limestone face on a scale to the south.



Black Star

Mayan pyramid at Chichén Itzá, Mexico.



David Supplebean

Pyramid house designed by Bob Couisins.

Before it was finished, the Grand Gallery was a precisely aligned astronomical observatory. With it one could, for example, mark the exact instant of the sun's passage through zenith at the solstice. Such observations enabled the priests to correct the calendar to its precise value of 365.2422 days, a crucial accomplishment in a society that depended on advance warning of the annual Nile flood.

The entrance passage is pointed with hairline accuracy at the celestial north pole. To the Egyptian astronomers, the North Star, however, would have been Alpha Draconis instead of Polaris, due to the precession of the equinoxes, the 26,000-year cycle caused by the earth's wobble as it spins. Precession makes the sun, as it moves through the constellations of the zodiac, appear to fall back one sign every 2,200 years. Since this celestial clockwork governs earthly fate and history, the sorcerers charted the equinoctial path into the future and foretold the next 5,000 years or so. Then they ingeniously designed the prophecies into the interior measurements of the passages that lead to

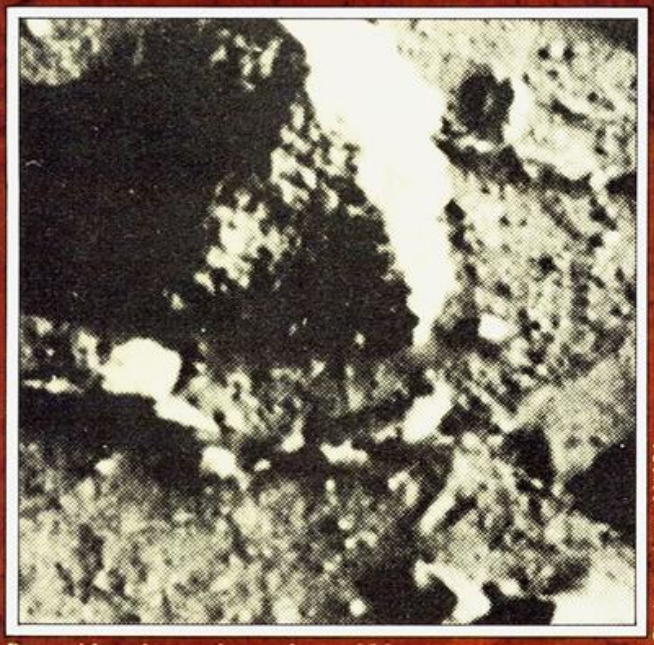
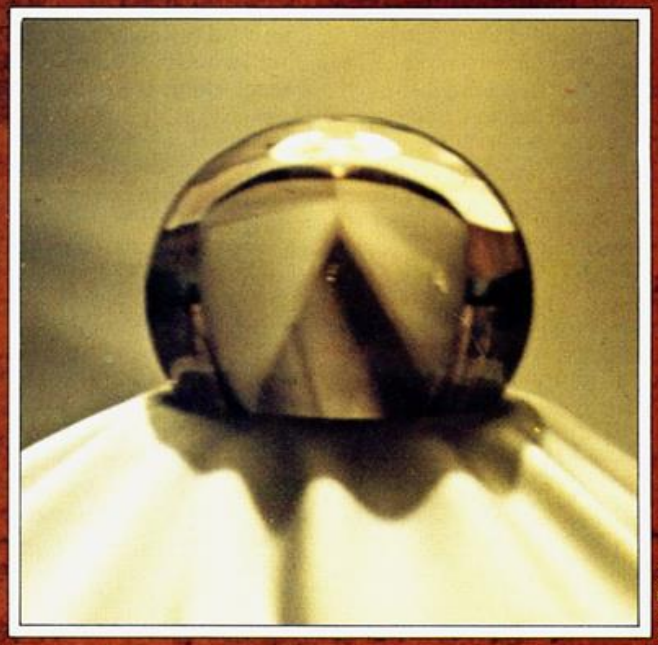


Photo courtesy of NASA

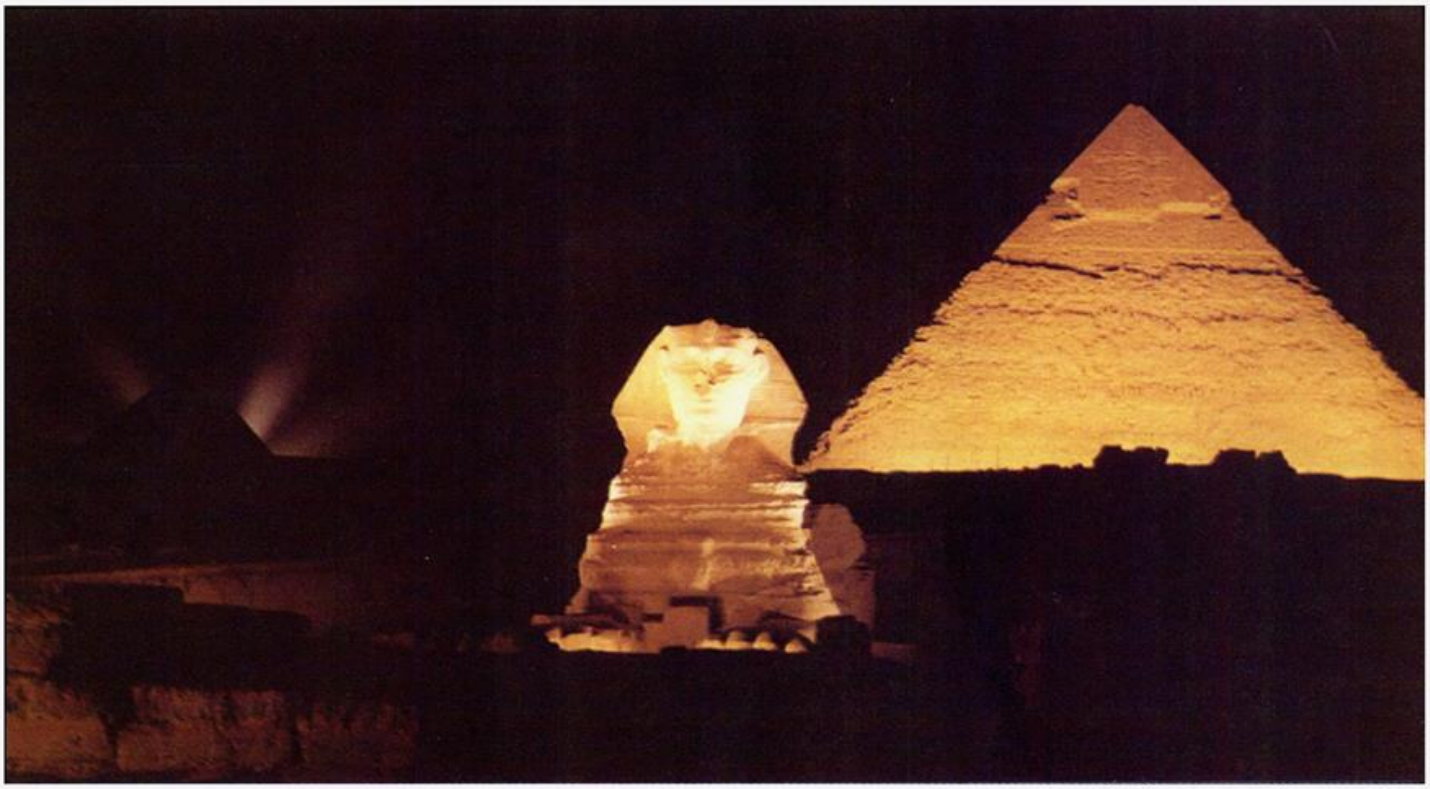
Pyramid rocks on the surface of Mars.



Max Thot

Image of a pyramid reflected in a crystal ball.

J. Alex Langley



Loppert

the King's Chamber, whose far wall culminates in the apocalypse—predicted for 1874, 1914, 1925 and 1953, now tentatively rescheduled for a few years hence.

For handy reverence, the pyramid builders planned their holy numbers into the dimensions of the outside. These included the value of *pi*, the solution for squaring a circle, *phi* (the Golden Section)*, the earth's average distance from the sun, the speed of light, the circumference of the earth, the earth's mass and the distance to Alpha Centauri.

All these arcana were embodied in the world's heaviest slide rule by utilizing the sacred cubit and pyramid inch, variously defined by modern reconstructors. The closeness of the latter to the English inch and the fact that the ancient Hebrews' sacred cubit was the same as the Egyptians' prove that the English are the true descendants of the ten lost tribes of Israel and that they and their descendants (us) will inherit the earth and eventually purge it of godless metrical decimal points.

The Great Pyramid's intricate system of passageways also forms an allegory of the journey of the soul (*ka*) from birth to the afterlife. Thus, depending on a person's choices, he or she can descend throughout life to end up in the subterranean Chamber of Chaos, from which there is no exit except a tortuous passage up through the Well of Life. On the other hand, if the soul is ready to receive the divine light, it can climb the Hall of Faith in Darkness into the spacious Grand Gallery of Illumination, then stoop to pass several stone portcullises symbolizing the final trials on the path to knowledge, which ends in the Chamber of Resurrection.

Pyramid structures found on Mars and the moon are beacons to guide incoming saucers and lead humankind to the stars.

It was here that the ancient ones were wont to conduct the neophyte for initiation into the mysteries of Isis. The candidate was given powerful incantations and even more powerful drugs, ceremonially laid to rest in the huge granite sarcophagus still found there and conducted on a three-day astral journey in which the soul, unburdened of the body, traveled freely and learned the secrets of death, space and time.

Among those so trained were Moses, Sophocles, Plato, Pythagoras, Cicero and St. Paul. The lesser secrets survived in fragmentary form among the Knights Templar, who built a small pyramid in southern France in the thirteenth century, and in the rites of present-day Masons and Rosicrucians. The concentrated energies of the King's Chamber were used by the priests themselves as an etheric transmitter for direct contact with the spirits of the departed and with the gods in their celestial chariots.

On the more mundane side, the system of chambers constituted an apparatus for collecting solar-magnetic energy. The sun's rays were collected and focused by the now-missing quartz capstone, amplified by the four flat chambers above it acting as lenses and collected in the King's Chamber. The stored power was then routed through the passages, which when filled with mercury formed a complete electric circuit, and was distributed where needed to the surrounding cities and farms. The stored forces of the King's Chamber were also used to transmute base metals into precious ones, and vice versa.

The exquisite workmanship of the Great Pyramid, for which the facing stones were cut and polished with such accuracy that you can't even stick a credit card between them, was also intended as a sign. Otherwise modern discoverers would not have been able to realize that the stones were cut with the aid of lasers. The impossible job of moving those massive blocks was then performed by psychokinesis, floating them through the air from quarry to site.

Clearly this perfect monument could not have been built by the simple Bronze Age technology of the Egyptians themselves; in fact there is good reason to believe that the Great Pyramid was erect-

*phi (ϕ), the mathematical symbol of creativity, is, like *pi*, an irrational number that can only be approximated (1.618...) by decimals or fractions. It expresses the proportion by which a number is precisely enough larger than one so that the same proportion exists between one and the difference between the two numbers. That is,

$$\frac{1.618...}{1} = \frac{1}{.618...} = 1.618....$$

Phi thus gives rise to an endless series, much admired by Greek and Renaissance scholars. Plato in his *Timaeus* went so far as to call it the key to the cosmos.

ed many thousands of years before all the others. Surely the edifice was raised by wandering survivors of the great Atlantean deluge, who left it as a time capsule for discovery by future civilizations who could recognize their subtlety.

Many millennia later, the refugees arrived in Mexico and Peru and taught the natives how to build a different style of pyramid. The Atlanteans themselves, of course, learned at the feet of the Lemurians, survivors of an even older, vaster and wiser submerged continent in the Pacific, whose culture flourished for 50,000 years during the last ice age. Who can deny that the Lemurians must have received their pyramid blueprints from the gods themselves, alien astronauts who bequeathed us all of civilization's treasures and are now returning to check on our progress?

After all, do not the lines scored on the entranceway point directly to Alcyone, central sun of the Pleiades, of which our sun is also a part? The sun's 24,000-year orbit around that star takes it twice through the Rings of Alcyone, a halo of hot dust and radiation belts that causes a 2,000-year age of genetic, geological and atmospheric upheaval every 12,000 years. Perhaps the UFOs are here to guide us through our next passage, which seems about to begin.

Even now, explorers have located at least three pyramids beneath the ocean and are preparing for the long task of excavating them from the sea floor's mire and returning their legacy to humanity's heritage. And the pyramid structures found on Mars and the moon can be nothing other than beacons to guide incoming saucers and lead humankind to the stars.

An article this length would hardly serve to list all the 20,000 titles of Egyptological writing, much less follow every strand of this gordian knot. Suffice it to say that some of the foregoing statements are definitely true, others probably are, and even the most outrageously unsupported fantasies have their champions. There are so many gaps in our knowledge of Egypt that the only certainty about the pyramids is that they are very old.

The mathematically oriented Pyramid quester finds, for example, enormous problems in measuring the pyramid to get at its numerical symbolism. Its base is buried in sand, almost all the polished outer casing was stolen by fourteenth century Arabs to build bridges and mosques, and the mysterious capstone, or pyramidion, vanished God knows when.

A W.W. II pilot saw a dazzling white pyramid nestled in the Himalayas.

Advocates of Edgar Cayce's teleportation theory of rock hauling, though, have run up against some very clear tomb paintings of the Egyptians moving huge slabs on sleds pulled by teams of men yoked together, pulling in rhythm to a timekeeper while assistants grease the runners with oil. Erich von Daniken, with his racist contempt for anyone born before the Industrial Revolution, dreamed up the laser idea because he refused to believe that primitive people could cut stone without them, even though other paintings show the method: preliminary scoring with a rock or copper chisel, then insertion of wooden wedges that when soaked in water expand and split the rock.

Such discussion could go on, and has, for centuries, but there is one position amateur pyramid hunters agree on: their scorn for professional archaeologists, the "entrenched orthodoxy" blind to new discoveries who persist in throwing a wet blanket over the most rhapsodic theories.

To the unpersuaded, the Great Pyramid fits comfortably within the sequence of pyramid memorials raised to the pharaohs of the Third and Fourth dynasties, thought to have ruled about 2800 to 2600 B.C. They say the period began with the construction of the stepped pyramid of Zoser by a royal architect named Imhotep, the world's first recorded genius. The reign of Zoser coincided with the end of a period of civil war after the first unification of the twin kingdoms of Upper and Lower Egypt. This explanation, as expounded by physicist Kurt Mendelssohn in *The Riddle of the Pyramids*, suggests that Imhotep had at least two brilliant ideas: He figured out how to construct enormous buildings by a series of inward-leaning buttress walls, and he realized that pyramids would be the perfect endless project to unite the realm, welding the world's first nation-state. (Mendelssohn himself suggests space colonization to end nationalism by building the first world-state.)

Mendelssohn then follows the pyramid sequence as succeeding generations tried to make the structures with smooth sides. They learned that the angle of the sides and slight inward slope of the blocks is crucial. They found this out the hard way, he says, when the pyramid at Meidum collapsed, leaving the central walls sur-

The Secret of the Great Pyramid Revealed

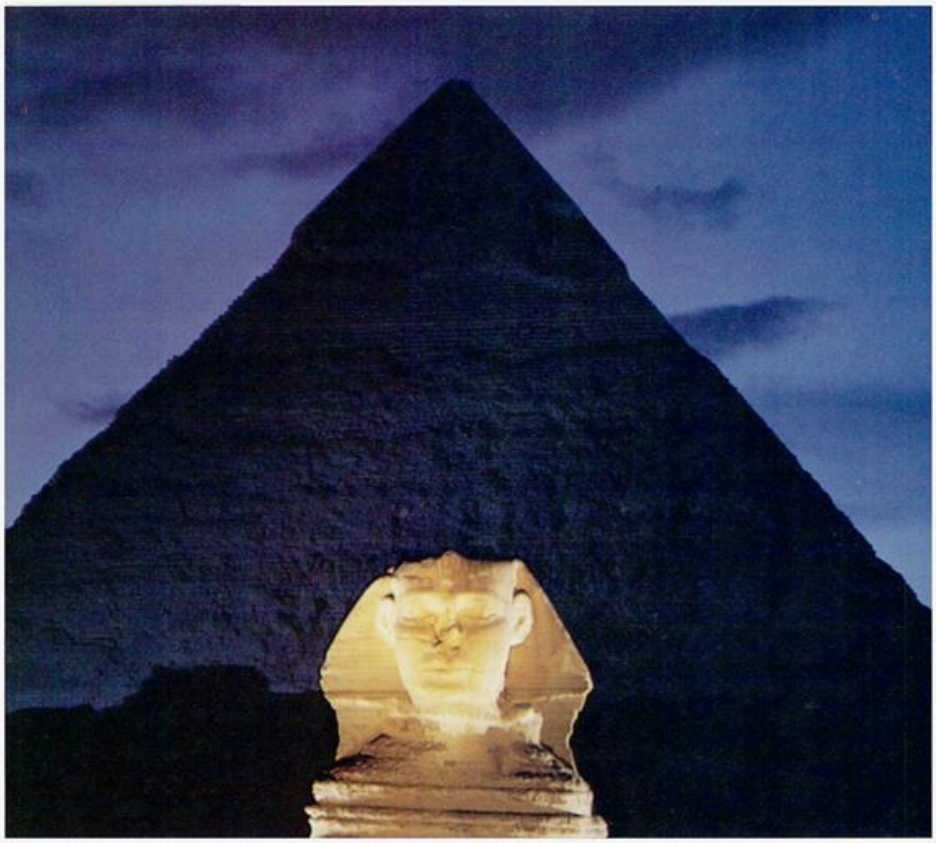
It was made in Japan

by Dean Latimer

Although it was erected according to the most precise specifications, *my* pyramid doesn't work. I cut four identical triangles out of cardboard, 12 inches long at the base with 11½-inch diagonals, and taped them into a pyramid; I oriented it toward true North with the aid of a Boy Scout compass and a New York Times almanac and set it on the floor of my office cubicle, safe from electromagnetic interference and the meddling of the idly curious. Eric McLuhan, Marshall's pyramid-powerful son, will be distressed to hear about this, I know, but the raw egg I left in there last Friday stank so bad by Monday that I'm lucky to still have an office. And after only a dozen or so shaves the expensive steel razor blade that rested each night inside the pyramid on its own north-south axis cut me badly.

Of course there is one thing I have not yet tried with my pyramid. Susan Sarandon told Johnny Carson on the "Tonight Show" that a cat that had been raised in the Great Pyramid at Giza turned out to be a vegetarian. But I am basically a carnivore myself and would not put a kitten to such an indignity.

Of course, my pyramid cannot really have proven anything about pyramids one way or the other. The instruments with which I measured the thing were ignoble metal, which alters microscopically with the weather; the almanac was for 1971, and the pole may have shifted a trace since then; and who's to say some ignorant *fellah* of a janitor didn't nudge the thing slightly one night, sweeping around it? Most of all, though, in dealing with anything as attenuated and mysterious as the bioplasmic properties of a pyramid, surely subtle considerations of karma and attitude are brought into play; I am a belligerently antimystical person, and I never *expected* the damn thing to work, so that may have fouled my egg and razor blade from the start. Truth to tell, I didn't *want* it to work. If it had, I would have suppressed the project and never written about pyramid power at all.



Peter Turner

rounded by a mountain of rubble. The angle was abruptly changed in the next design, producing the Bent Pyramid at Dashur, which was already half finished, the enormous work crews being shifted to the new structure while a smaller gang finished off the top of the previous one. Architects continued to experiment with angles until 51° 52′ was chosen for the Great Pyramid of Khufu.

In *Secrets of the Great Pyramid,* author Peter Tompkins offers a fascinating account of how the Egyptians *could* have used the pyramid as the best observatory before telescopes. Finished only up to the 50th course, the Grand Gallery would have jutted upward, a huge graduated slot with which to observe exactly when any star within view passed across the meridian, or true north-south line. The magi then found it much easier to chart the irregular motion of the planets, giving them the basis for deducing the heliocentric solar system (beating Copernicus by 4,000 years) and inventing the structure of astrology pretty much as we know it today. This wonderful theory rests primarily on references to a pyramid observatory by Arab historians and by the Greek philosopher Proclus, whose commentary on Plato's *Timaeus* states that observations were made before the heap could be completed.

The reasoning was elaborated around the turn of the century by astronomer Richard Proctor. He noted that the corbeled walls of the gallery would have been convenient markers by which to measure a star's declination (distance from the celestial equator). By seating a series of observers on removable benches in the 27 pairs of socket holes lining the passage walls, the astronomers could make simultaneous observations necessary for keeping accurate sidereal time (kept by following rotation of the earth as revealed by the movement of the stars overhead) and for plotting the first star maps. By placing an opaque screen with a small hole in it over the Grand Gallery entranceway, the priests could have made direct observations of the sun, including the study of sunspots.

With an obsession as charged with yearning as is pyramidology, it's hard to know what to believe. Pyramid literature is rife with contradictions about basic facts. Such include the cosmic ray measurements taken by Dr. Luis Alvarez inside the pyramid of Khafre, or Chephren (Khufu's, or Cheops's, neighbor), to see if there were any undiscovered passages. A controversy then allegedly developed between Alvarez, who claimed the results were normal and showed no secret chambers, and his assistant, Dr. Amr Gonein, who said that each time the data tapes were run through the computer a different pattern emerged. In other words, the interior cosmic ray picture wouldn't sit still. "Either the geometry of the pyramid is in substantial error," Gonein was quoted, "or there is some force that defies the laws of science at work in the pyramid."

So, except for those whose passion is to believe *anything*—the fuzzier the better—there's an understandable hesitance at the bandwagon.

Along with the dazzling portents of pyramids, science has its Piltdown man (the "missing link") and its patchwork mouse (cancer cure forgery), and computer analysis has recently shown that Claudius Ptolemy, whose geocentric view of the solar system held back astronomy for 1,500 years, faked his most important calculations. Thus there's hope that, however late, the truth will out.

Here are some of the more or less verifiable pyramysteries we can look forward to solving in the next decade or two:

- Photos of Mars taken by Mariner 9 disclosed four odd-looking mountains, almost 5,000 feet tall and vaguely resembling pyramids with one side weathered away by the winds. There also are claims of strange obelisk shapes photographed on the moon by U.S. and Russian probes.
- Lots of good scientific work can check out the claims of pyramid energizers. Up to now, electron photomicrographs of razor blades have shown no renewal of sharpness, though pyramid powerists claim it occurs from the dispersion of residual water on the edge. Many independent researchers claim to have proved the pyramid's powers to their own satisfaction, but the only published controlled scientific study I know of—by Iris M. Owen and coworkers at the New Horizons Research Foundation, in Toronto—showed no change in the sharpness of a razor's edge, no mummification effect and no clear-cut advantage in preserving vases of flowers. Owen reported that the participants' most common reaction was "Too bad you couldn't get your pyramids to work" and observed, "Neither buyer nor seller in this market appears to be overly critical."
- James Gaussman, a crewman aboard an army C-47 flying over the Himalaya hump in World War II, claims he was only one of many airmen to glimpse a dazzling white pyramid with a crystal capstone nestled in the unexplored mountains, and another flyboy photographed one in China's Shensi Province.
- Divers have reported discovering two pyramids, about 100 miles apart, on the ocean floor in the Devil's Triangle area off the coast of Florida. From one of these, undersea treasure hunter Dr. Ray Brown claims to have recovered a unique crystal ball when he swam into a passageway near the apex. The crystal was poised in the center of the chamber on a sort of stand. It often shows reflections of a pyramid within it, once developed a perfectly formed human eye and later emitted light for hours before one of Dr. Brown's lecture audiences.
- A group in Louisiana is preparing to explore a spot in the Gulf of Mexico south of Chandeleur Island, where they have a "psychic fix" on another pyramid.
- And last but not least, a Japanese company plans to build a one-sixth-size scale model beside the Great Pyramid to find out how to transistorize them. ◘

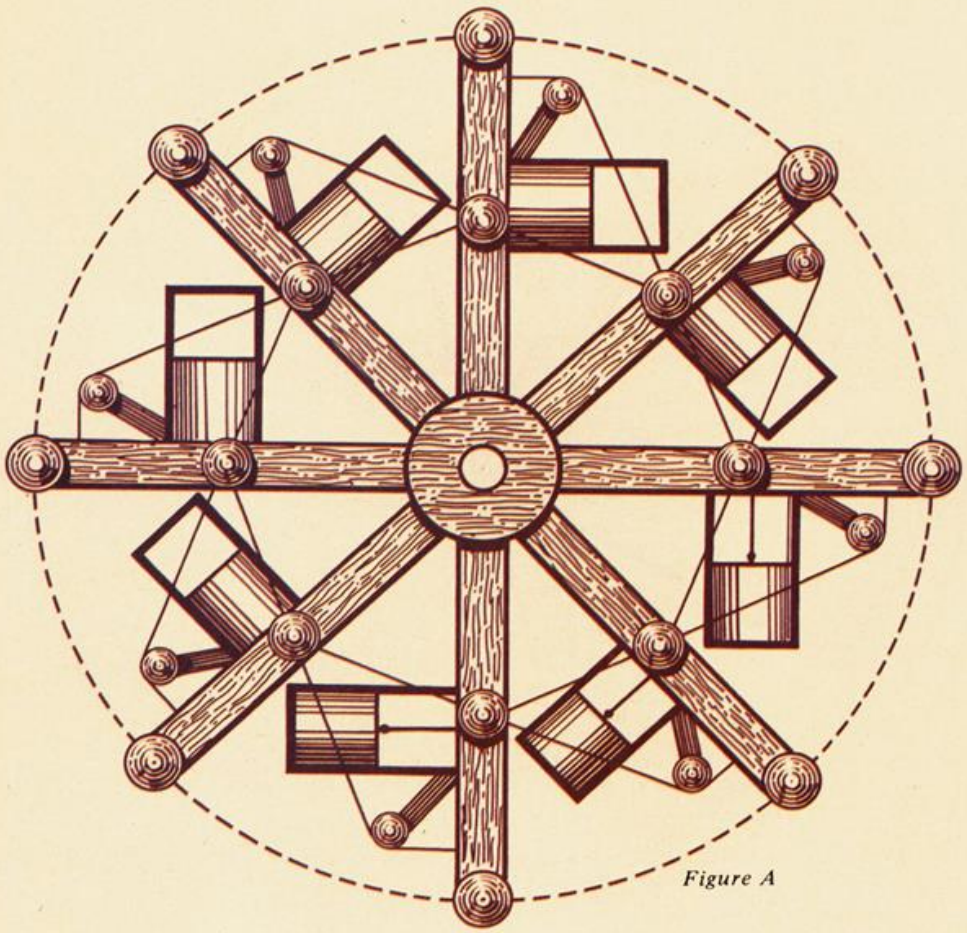


Figure A

The Amazing Perpetual-Motion Machine

Discover the secrets of the self-winding universe

by Colin Warbeck

Ever hear of the fabulous "Antikythera Device"? This is a real thing: fished up in 1900 from among the coral-coated wreckage of a Greek trireme that sank in the Aegean about 50 B.C., this contraption had enough metal drive shafts, flywheels, cranks, pullies, cogs and spindles to completely refit a 1935 Allis-Chalmers tractor. What's more, it worked like a dream: once all the rust and coral were scraped off the parts, why, the teeth fit right into the cogs, the threads meshed flush with the spindling, the dial pointers edged knowingly across their gauge mounts, and it predicted the *future!*

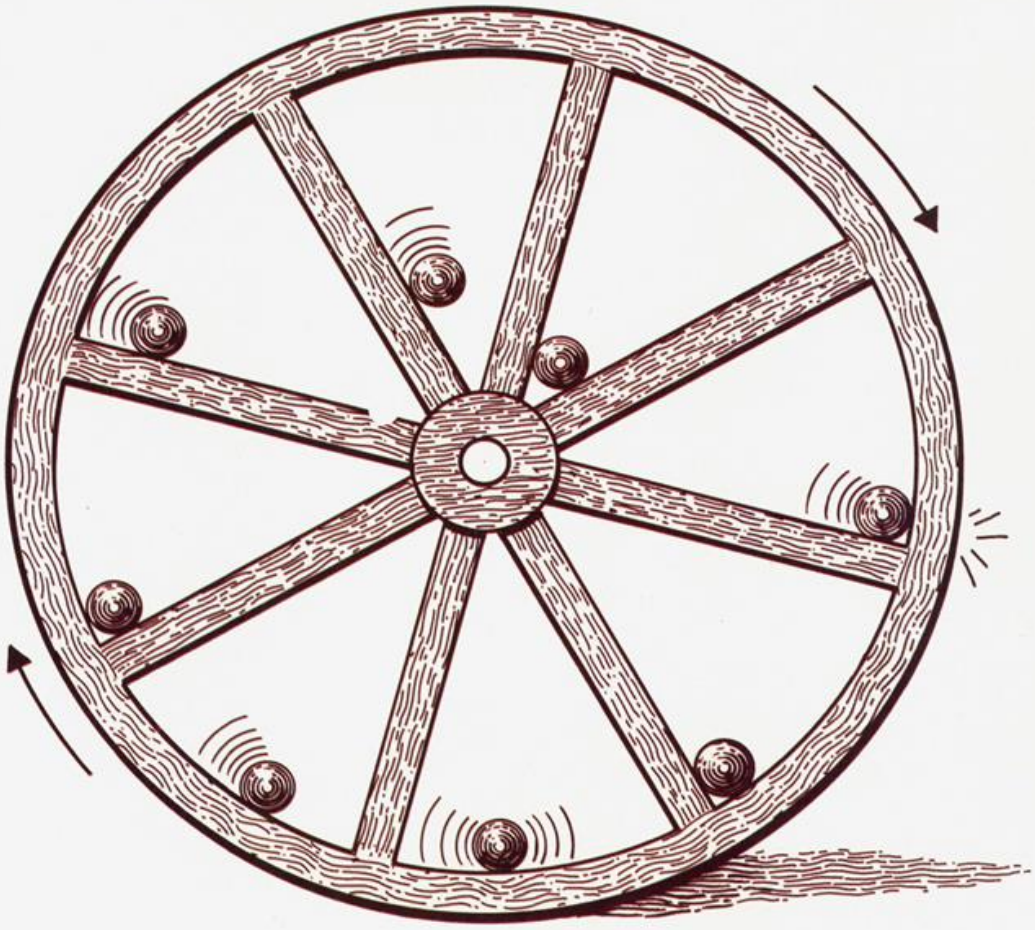
Specifically, when programmed properly, the Antikythera Device can divine the phase of the moon on any given night in history, with the relative positions of the five visible planets, the rising times of Sirius and Canopus and the astrological house inhabited by the sun on that date. Although some pundits have cited it as certain proof of strange encounters with the UFO gods in the reign of Julius Caesar, actually the Antikythera Device (so named because it was found near the Attic shore across from the Isle of Kythera) is no more technologically complex than a lot of machinery that was current in its era. Descriptions abound in classical writings of fabulous water clocks, for instance, which exhibited life-size human and animal automatons in brass and iron, hourly performing complicated acrobatics, making music, even singing in weirdly human voices.

Of course all this seems incomprehensibly out of place at first glance—hell, these people didn't even wear *shoes* as we know them—but only if you've never known a real engineer. Compulsive, natural-born engineers are curiously different from the rest of the human population and were the same in 50 B.C. Though they invariably are callow, inarticulate and unutterably boring, real engineers seem to somehow sense the most attenuated connections between things in the universe—the invisible synergy between possible cause and potential effect—and they will disfigure heaven and earth to work these impossible things out in practice. They don't do this for the money or the fame, or to feed the starving millions of the world, or even to exterminate them—no, they do it because of something even deeper than art. These machines are created merely because they *possibly could* exist, and when a real engineer comes together with enough money for the project, then they *certainly do* exist. We got to the moon, didn't we?

But if there is one thing that confounds and torments true engineers, spites them and fills them up with an anguish very

Illustrations by Ken Taylor

Figure B



much *like* art, it is the perpetual-motion machine. This would be the machine nonpareil, an entity absolute in its hermetic mechanical integrity, working forever and ever all of itself, feeding on nothing and engendering nothing, the *machinum ex deus*. When engineers just think of a perpetual-motion machine, their mouths fill up with spit and they reach for a wrench; and this cosmos seems to them a cheap and shabby place for not permitting such an innocently beautiful thing within its precincts.

Although it was undoubtedly beschemed a million times before him, the medieval inventor Villiard de Honnecourt left the first extant design of a perpetual-motion machine in his lovely counterbalancing wheel (Figure A). He had to be one of the sweetest persons who ever lived, de Honnecourt: "This is my design for a device which, when once set moving, will revolve forever without stopping. Equidistant along its rim are fixed eight weights on retractable rods, so that as the wheel turns, as you can see in my picture, the rods along the down-falling forward rim are thrown outwards, imparting a forward thrust to the device. The rods along the hindward rim fall inward, so that the weights there are closer to the axis of the wheel: this will abolish the drag on the up-rising rim, and the wheel will turn forever. If anyone would like to fashion such a device, this is the plan."

Of course poor Villiard, in the thirteenth century, had only the mistiest notion of what a bummer gravity really is. He clearly imagined that the critical factor here was getting the weights to travel up from nine to twelve o'clock and considered that by keeping them down toward the axis through that quarter of the arc, why, it'd work like crazy! Before very long, in fact, engineers everywhere were constructing wheels after this brilliant design—and it really *is* brilliant, considering the age—and refashioning it feverishly when it inexplicably failed to work.

Probably the best counterbalancing-wheel scheme (Figure B) involved a series of heavy metal balls that would run along the inner rims from three to nine o'clock and roll from nine straight back to three the instant each particular ball rose just a trace higher up than nine o'clock. The anonymous inventor doubtless felt that the impact of the ball hitting the three-o'clock rim would impart the forward energy necessary to raise the next ball that one critical nudge up above nine o'clock. Well, by Celsius, why *shouldn't* it work that way?

The idea was so immaculate, symmetrical and reasonable that in 1640 Edward Somerset, second marquess of Worcester, built a majestic 14-foot counterbalancing wheel containing 40 steel balls of 50 pounds each. This he displayed proudly to King Charles I, who was immeasurably impressed by the thundering, clamorous contraption in the two minutes he got to watch it, before they hustled him off to look at something else.

At the same time, over in Cambridge, Sir Isaac Newton was heartbrokenly composing his law of the conservation of matter and energy, having finally abandoned his lifelong unrequited romance with perpetual motion. More appropriately speaking, it was perpetual motion that jilted Sir Isaac. After long and loving study, Newton had finally divined that the problem with the counterbalancing wheel arose between six and nine o'clock, not nine and twelve. Gravity, that mean bitch, sucked more energy out of the wheel in the third quarter of its spin than you could ever make up for without cranking it by hand. And worse yet, the device depended entirely on that treacherous, murderous gravity to start it going in the first place. This was the real inspiration behind the Newtonian universe, and it was infinitely more painful for Newton than being clouted on the head by an apple.

Figure C

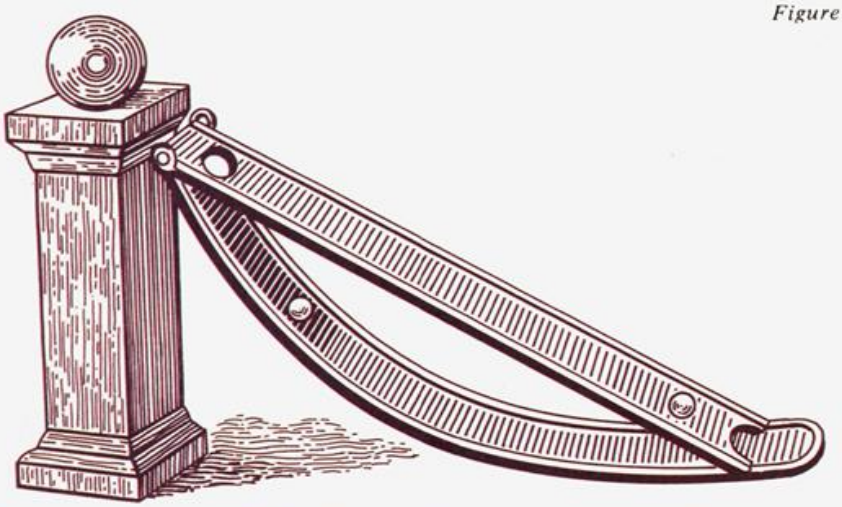


Figure D

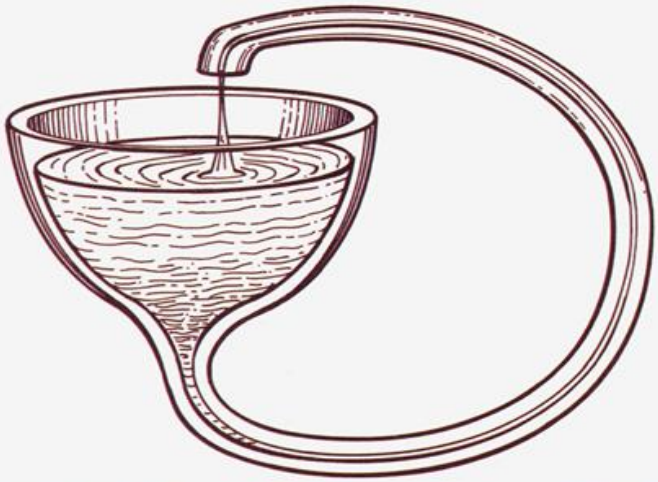
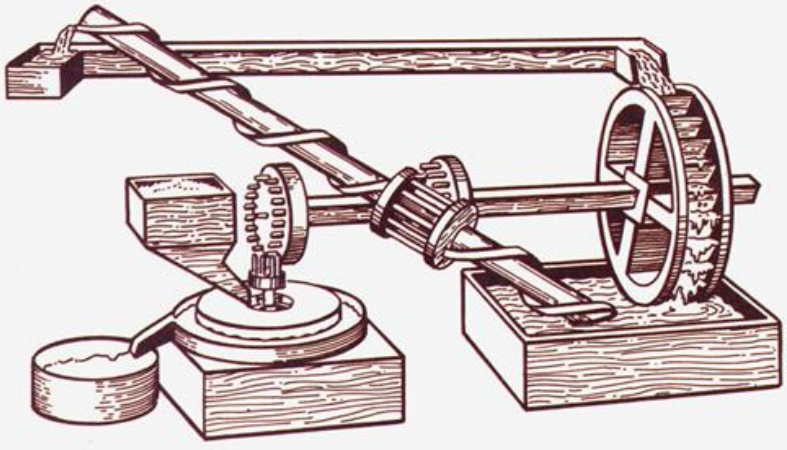


Figure E



Still, they tried and tried. For generations, engineers were attempting to reduplicate the demonstration of "The Magnetickal Virtues" supposedly performed in 1620 by John Wilkins, the bishop of Chester. His Excellency had allegedly set a lodestone at the top of an inclined plane (Figure C) and had it draw a bullet up the plane until it fell through a hole and rolled down a curving slope to its original site; wherefrom it was drawn up again, fell through the hole, returned... Everybody else who ever tried this brainstorm discovered that any magnet strong enough to draw the bullet upward wouldn't allow it to drop through the hole. But maybe the bishop was getting an assist from another dimension.

Hydraulics engineers saw ravishing possibilities in water physics. In 1686 another clergyman, the abbé de Roque, proposed a broad-mouthed beaker (Figure D) tapering down into a narrow tube, which arched back up over the beaker's mouth. Once filled, the massive quantity of water at the top would assuredly force the water at the bottom up through the tube, fountaining back into the mouth, forever. But *sacre bleu!* The accursed water, it only rises up the little tube to its own level!

And well into the nineteenth century, the self-propelling mill wheel was a highly seductive possibility. This was first proposed in 1618 by a man with the happy name of John Fludd. A waterwheel (Figure E) dumps into a millrace enough water to generate a current to turn a big screw inside it: the water is then carried up the threads of the screw and dumped into a trough overhead, which carries it back to the millwheel. Of course you'd have to replace the water as it evaporated, which undermines the pristine integrity of the device. But once given that insignificant capitulation to necessity, for what reason should it not run *forever*? Visionary engineers were building these things for 200 years after Fludd died.

Finally in 1832, one Sadi Carnot showed the French Academy of Sciences exactly why this sort of thing doesn't work: there's no such *thing* as a total conversion of energy into work, and certainly no way a falling object is going to generate enough force to raise itself back up to its original height. There's no millwheel in the world that wouldn't waste a little energy just in making noise. Citing the impossibility of perpetual motion as a specific axiom, Carnot and some friends went on to legislate the bitter and depressing second law of thermodynamics. Engineers despise this ghastly law the way cocaine dealers hate the Harrison Act of 1914—it doesn't let you have *any* fun!

When the intoxicating properties of electricity first began to be scientifically plumbed, naturally it was implicated in a flurry of perpetual-motion fantasies. Probably the most representative of these was a self-activating electromagnetic device (Figure F), proposed hopefully by several different inventors to the U.S. Patent Office in the 1860s and '70s. The essential concept is of an electromagnet that generates just enough power to switch itself off: when this happens, the magnet's own attraction draws toward itself a steel rod that, by slipping past some metal brushes, generates enough friction electricity to turn the electromagnet back on, so that it can turn itself back off. *Eureka!* Perpetual motion!

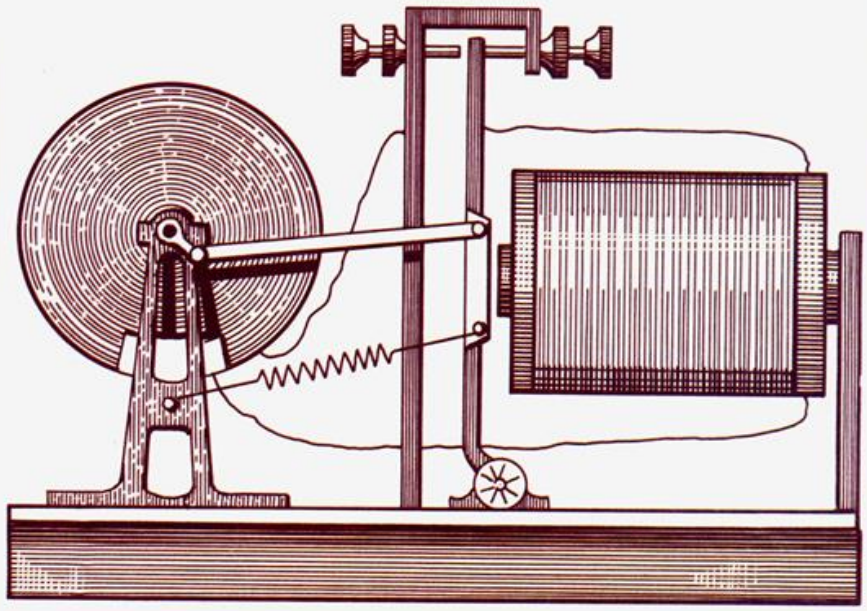
Now this would be utter balm to the

soul of an engineer, who could whip it together in a half hour and for the rest of his or her life watch it swishing and sparking merrily away, like Aristotle contemplating the bust of Homer. Alas, it is that very swish and spark that dooms the apparatus to an early death: noise and light represent the unauthorized discharge of electrons into non-"work" manifestations of energy, and the thing abruptly collapses like an overstimulated erection. And even if you could eliminate the swish and spark by some truly obscene affront to the fundamental properties of natural physics, even so, the wear and tear on the metal brushes would ultimately murder the whole entity.

The amorphous properties of the noble gases looked hopeful for a while. In 1889, a British engineer named John Gamgee suggested a "Zerometer" machine (Figure G), so called because it operates only in a room where the temperature is 0 degrees centigrade, or 32 degrees Fahrenheit. At this temperature, liquid ammonia evaporates with an expansion force of four atmospheres, which can easily push a cylinder out of the closed vessel that contains the ammonia. Gamgee actually *built* this mother and then discovered that to reduce the pressure in the vessel so the cylinder would slide back inside, he had to reliquify all the ammonia; and the only way to do that would be by reducing the room temperature to -33 degrees centigrade.

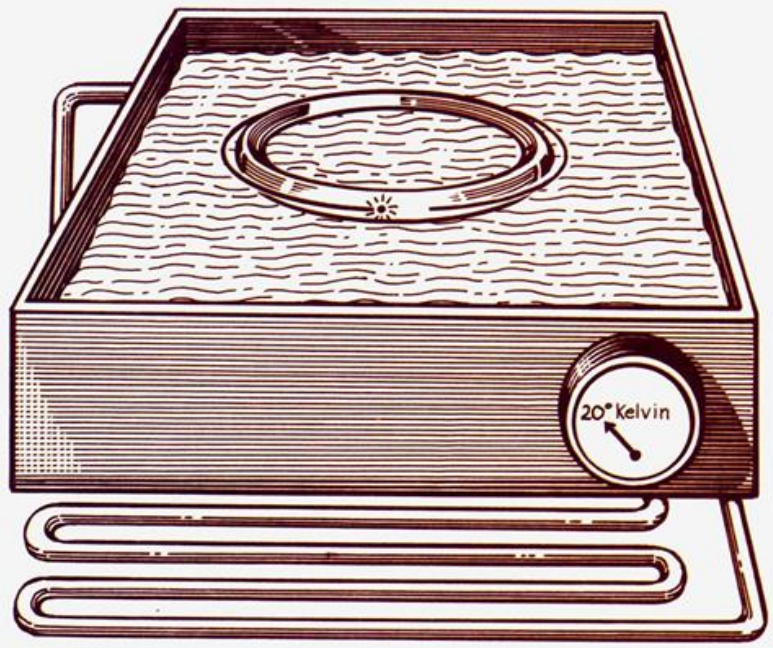
Which brings us to the very latest perpetual-motion brainstorms, which involve cryonics itself. It seems that around 20 degrees Kelvin, which is colder than Neptune's north pole, 24 different metals lose all molecular resistance and become superconductors. For instance, a jolt of electricity could pass round and round inside a ring of superfrozen gold, *forever*. In fact it's been done for periods of nearly a year at a stretch with rings of deep-frozen metal. You could tell the ring was still charged after months, because a compass set next to it would deflect from true North. So it's certainly perpetual enough, but there's a catch: the motion can't possibly be converted into enough energy to keep the environment refrigerated to 20 degrees Kelvin, which unhappily is a temperature that doesn't occur in nature.

Figure F



When engineers just *think* of a perpetual-motion machine, their mouths fill up with spit and they reach for a wrench.

Figure G



On the bottom line, the closest we're ever likely to get to perpetual motion is the sort of wristwatch that "self-winds" by adjusting to changes in atmospheric pressure. But even this falls short of the engineering ideal, as it's really no more "perpetual" than any machine run by solar power. The sun itself, after all, is doomed by that ugly old second law to run down just like de Honnecourt's magic wheel.

Unless it turns into a supernova, that is. Speculation still has it that the sun's mass is just a trifle too flimsy to ever really nova, but nobody's absolutely sure about it. And if *that* gorgeous thing were to happen, why—imagine a whole *star* turning into chrome, and then magnesium, and then copper and iron and lead, and finally it collapses on itself and sucks its own light back in through the hole. And then just maybe it pops out halfway across the universe through a *white* hole! Now that would be a *mean* machine.

OLDIES BUT GOODIES

FROM THE

High Times

VAULT





The way people hoard back issues of *High Times*, you would think that they were made of gold. Certain issues of *High Times* are as hard to come by as top shelf reefer during a drought. But don't fret. We've taken the cream of the *High Times* crop out of our vault, and for a limited time only we'll send you back issues at $2 each plus 50 cents postage and handling. Don't delay. Fill out your collection by filling out the coupon and sending it to us with your check or money order.

#3: The Man Who Turned on Leary—Marijuana Under a Microscope—Pancho Villa and Pot—Hash in Kashmir

#4: A Pro Dope-Taster Talks—Thai Sticks—Choosing a Lawyer—Holy Fungi—Smuggling Reports from Around the World

#6: Chocolate: Aztec Sex Drug—Dalai Lama Interview—Aldous Huxley on Moksha—Andrew Weil on Yage—Albert Goldman and Chic Eder on Dope in Prison—The Pot-Tit Scare

#8: Morocco Kif Harvest—*Peyote Dance* by Artaud—"Marijuana: Assassin of Youth" by Harry Anslinger—Art Kleps on Acid—U.N. Narcs

#9: Coca Tour of Peru by Andrew Weil—African Dope Scenes—Wilhelm Reich vs. the UFOs by his Son—Pot Plant Parasites—Dealers' Hall of Fame

#10: Legal Coke—Grow Magic Mushrooms—Merchant Marine Smugglers—William Kotzwinkle's *Doctor Rat*—Hash in the Sahara—Nitrous Oxide

#11: The Masons: Occult Politics in America by Glenn O'Brien—LSD Inventor Albert Hofmann—How to Grow Sinsemilla—Best Smuggling Planes

#12: Valium—Piss, Leather and Mushrooms—Opium Tribes—Pulque, Mexico's Psycho-Booze—The Marijuana Luftwaffe

#13: Rasta Reggae Special—Buying Judges—Paul Bowles on Kif—Tom Robbins's *Even Cowgirls Get the Blues*—Michael Stepanian, Dope Lawyer

#14: Lenny Bruce's Banned Pot Book—Death of Vaughn Bode, Cartoon Guru—Coke and Your Nose—Big Sur Sinsemilla—R. Gordon Wasson on Mushrooms

#15: U.S. Government Pot Farm by Anthony Haden-Guest—Smuggler Interview—Hash Hells of New York, Classic—Frank Costello—Coffee—Mangoes—Hand of Ken Burnstine

#16: Blockage Runners by Albert Goldman—Glue Sniffing—Tom Robbins on Mushrooms—Mescalito—Hollywood Pentagon

#17: LSD Special—Bicentennial Trips—Medieval Tripping Plagues by Dean Latimer—Does Pure Acid Exist?—Backgammon—Bigfoot—Bay Area Bombers

#18: Mexico's Silent Zone—Harvard's Dope Doc—Robbing Drugstores—Hash Oil—Freak Brothers—Special Punk Magazine Bonus—Jazz & Dope in New Orleans

#19: Dope Dictators: Dope War Replaces Cold War in Foreign Policy by Robert Singer—Weil on White Sugar—History of Dope in Cinema, Part I—Tramp Freighters

#20: Castaneda: Hoax or Magic?—Frank Sturgis Spills Cuban Beans—Surrealist Antipasto—Dope in the Cinema II—Spring Travel—Robert Sabbag's *Snowblind*—Freak Brothers—Commander Cody's Homegrown

#21: Glenn O'Brien's Civil Defense Childhood—Harry's Last Tape: Anslinger on Deathbed—VAMP: Women's Humor Magazine—Mexican Dope War—Sticky Fingers: All About Honey—Jerry Kamstra's Yum Yum Estates—Nomad—Freak Brothers

#22: Inside Blondie's Brain—Punk Rock's Marilyn Monroe—Dana Beal Demands Guaranteed Stash—Captain Crunch—Super Phone Phreak—*Murder at Elaine's*—Mystery for the Mind—Guide to Psychedelic Cacti—Albert Goldman's Hash Brownie Freakout—Dope Etiquette—Nude Beaches and Sexy Minisuits—Nitrous Party Centerfold—Freak Brothers

#23: Confessions of a Narc by Paul Krassner—Ten Best Smuggling Ships—Spaced Out Sissy Spacek—More *Murder at Elaine's*—White House Smoke-In Centerfold—Freak Brothers

#24: Coca-Cola and Cocaine—The Lolita Complex —Killer Narc Squad—Dolly Parton Interview—Great Grass Trials—*Murder at Elaine's*: Part 3—Freak Brothers

#25: Inside Federal Joint Rolling Factory—Government Spying by Ramsey Clark—Murder on the Opium Express—Absinthe, the Illegal Liqueur—Hunter Thompson Interview—Freak Brothers

#26: Johnny Rotten and the Sex Pistols—Guide to Gurus—Radio Ethiopia by Patti Smith —Ted Nugent Interview—Who Turned On Whom?—*Murder at Elaine's* continued

#27: Mighty Mezz—Confessions of a DEA Agent—White Slave Trade—Kill for Peace—Basketball's Bill Walton—Free the Heads by William Kunstler—ESP Powers Increased by LSD

#28: Richard Pryor Interview—*Murder at Elaine's* conclusion—Invasion of the Disco Driods by Albert Goldman—Xmas Extra—Peyote Magic—The Coca Fields of Bolivia

#29: Keith Richards Interview—Informer Chic—Superstar Dust—Panama Red— Lebanon: The Valley of Hashish—more Dope in the Cinema—Lord Buckley by Albert Goldman—Guide to India—Tina Turner

#30: Michael O'Donoghue Interview—LSD Now—How to Live Forever—Punk Legs McNeil on Drying Out—African Khat—Brooke Shields—A Touch of Velvet

#31: Dope Photography Contest—Cuba—Punk High Style—Pygmy Kitabu—A Nation of Informers by Richard Ashley—250 Pounds of Dope—Susan Sontag Interview—Dope Rock Lyrics

High Times Back Issues,
Dept. HT 36
Box 386 Cooper Station
New York, N.Y. 10003

Please send me the following issues:

☐ 3	☐ 4	☐ 6	☐ 8	☐ 9	☐ 10	☐ 11	☐ 12	☐ 13
☐ 14	☐ 15	☐ 16	☐ 17	☐ 18	☐ 19	☐ 20	☐ 21	☐ 22
☐ 23	☐ 24	☐ 25	☐ 26	☐ 27	☐ 28	☐ 29	☐ 30	☐ 31

Name _____

Address _____

City _____ State _____ Zip _____

Enclosed is a check or a money order (payable in U.S. funds). Back issues are $2 each plus 50 for postage and handling. Allow 4 to 6 weeks for delivery.

This powerful weapon can help free prisoners of conscience all over the world.

There are half a million men and women in prisons around the world for the simple crime of disagreeing with their governments.

From South Africa to the Soviet Union, from Brazil to Korea, authoritarian regimes persist in the barbarian practice of jailing, often torturing, their citizens not for anything they've done, but for what they believe.

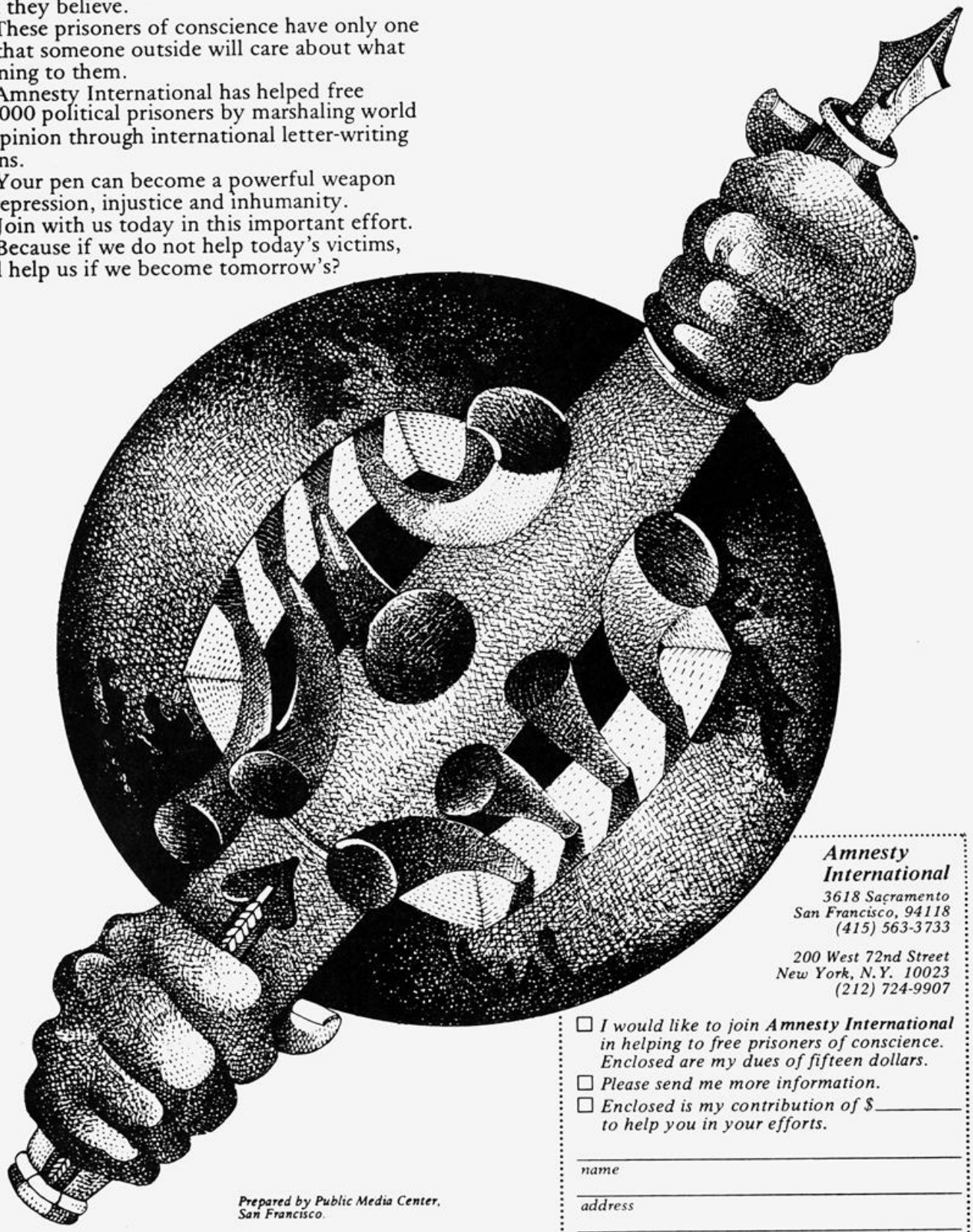
These prisoners of conscience have only one hope — that someone outside will care about what is happening to them.

Amnesty International has helped free over 14,000 political prisoners by marshaling world public opinion through international letter-writing campaigns.

Your pen can become a powerful weapon against repression, injustice and inhumanity.

Join with us today in this important effort.

Because if we do not help today's victims, who will help us if we become tomorrow's?



Prepared by Public Media Center, San Francisco.

Amnesty International

3618 Sacramento
San Francisco, 94118
(415) 563-3733

200 West 72nd Street
New York, N.Y. 10023
(212) 724-9907

☐ *I would like to join* ***Amnesty International*** *in helping to free prisoners of conscience. Enclosed are my dues of fifteen dollars.*

☐ *Please send me more information.*

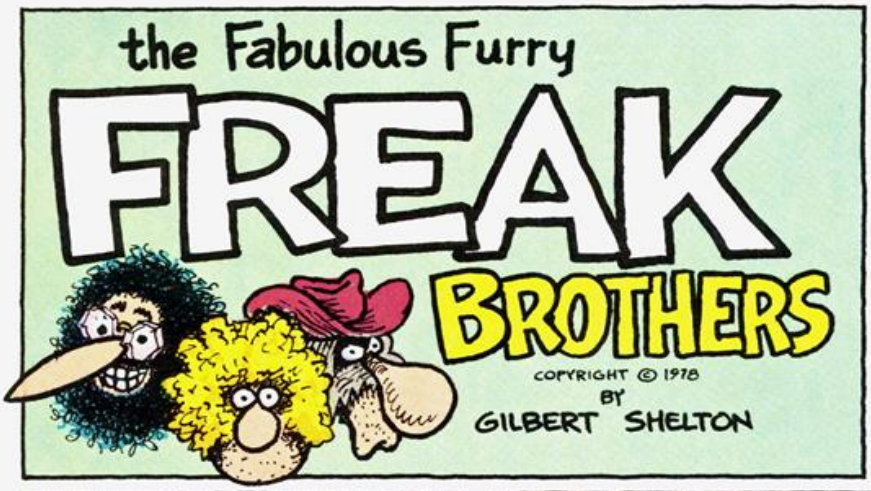
☐ *Enclosed is my contribution of $_____ to help you in your efforts.*

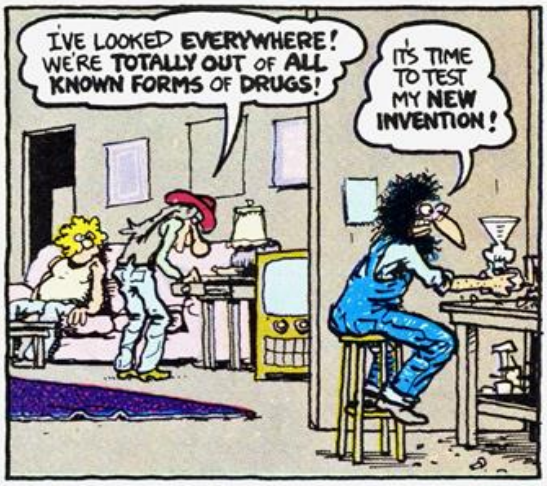
name

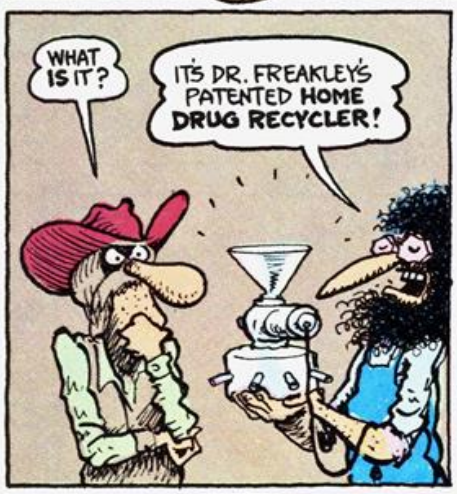
address

city *state* *zip*

(Dues and donations are tax-deductible)


the Fabulous Furry
FREAK
BROTHERS
COPYRIGHT © 1978
BY
GILBERT SHELTON


I'VE LOOKED EVERYWHERE! WE'RE TOTALLY OUT OF ALL KNOWN FORMS OF DRUGS!
IT'S TIME TO TEST MY NEW INVENTION!


WHAT IS IT?
IT'S DR. FREAKLEY'S PATENTED HOME DRUG RECYCLER!


YOU JUST SWEEP ALL THE DUST AND DEBRIS FROM THE COFFEE TABLE INTO THE HOPPER HERE ON TOP...


...AND WHEN I PLUG IT IN, THE DIRT IS SIFTED THROUGH A SERIES OF COLOR-SELECTIVE FILTERS...
WHIRRRRR


...AND ALL THE DIFFERENT COLORED THINGS COME OUT IN SEPARATE PILES!
THIS PILE OF GREEN STUFF HERE IS OBVIOUSLY TINY FLAKES OF MARIJUANA! AND THIS WHITE POWDER IS PURE COCAINE!

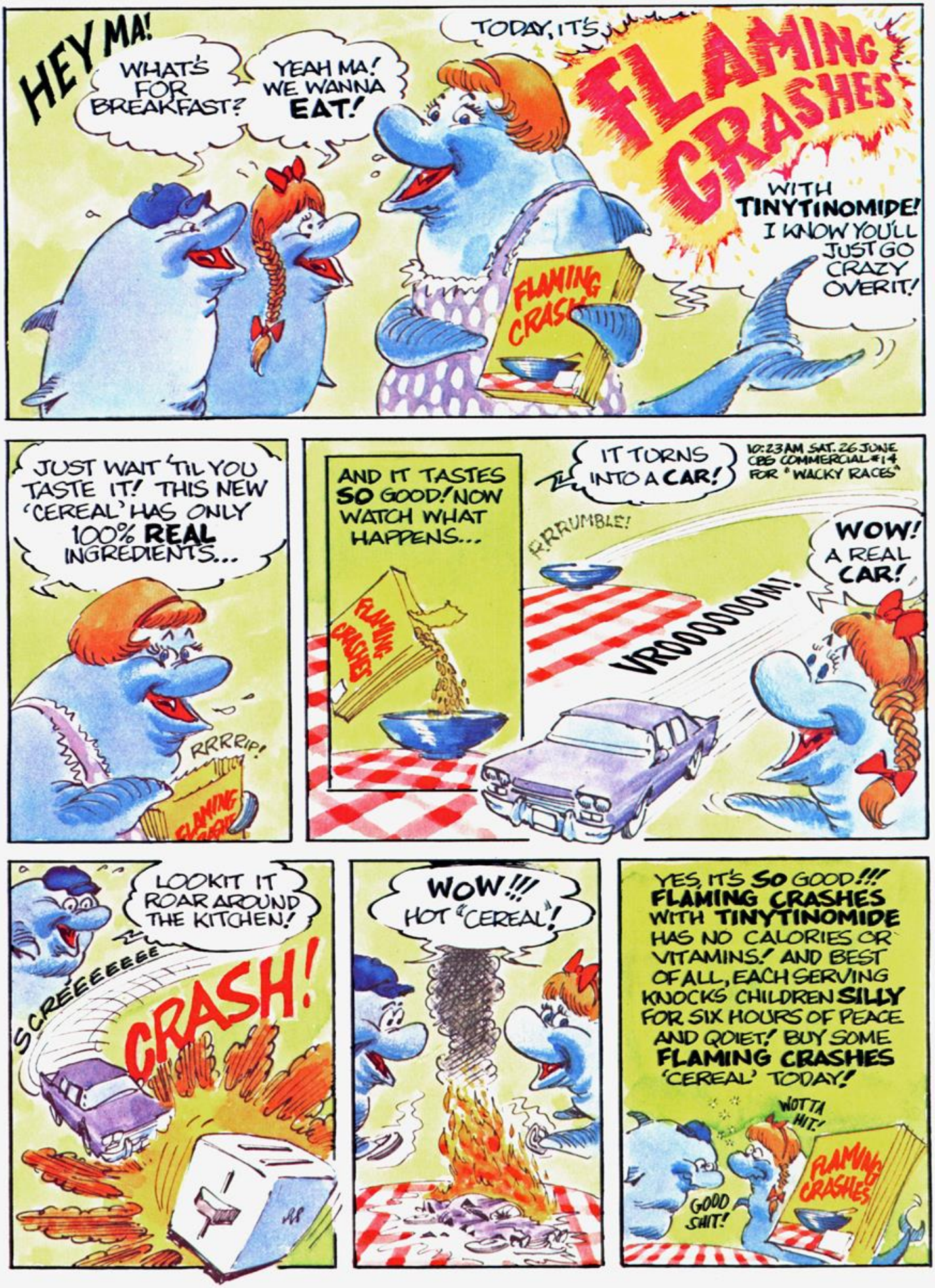

WOW! IT'S TRUE! THIS IS GOOD CLEAN WEED!
SSSSSSP!
SNURF!
AHHHHH, EXCELLENT COKE, TOO!


THAT'S ALL WE CAN GET OFF THIS TABLE!
LET'S GET THE CRACKS OF THE SOFA!


SNUFF! SNORT!
THAT BATCH DIDN'T LAST VERY LONG, EITHER! I'M DISAPPOINTED!
PUFF! GULP!
YEAH, I EXPECTED MORE FROM THIS SOFA! IT MUST BE TOO NEW!

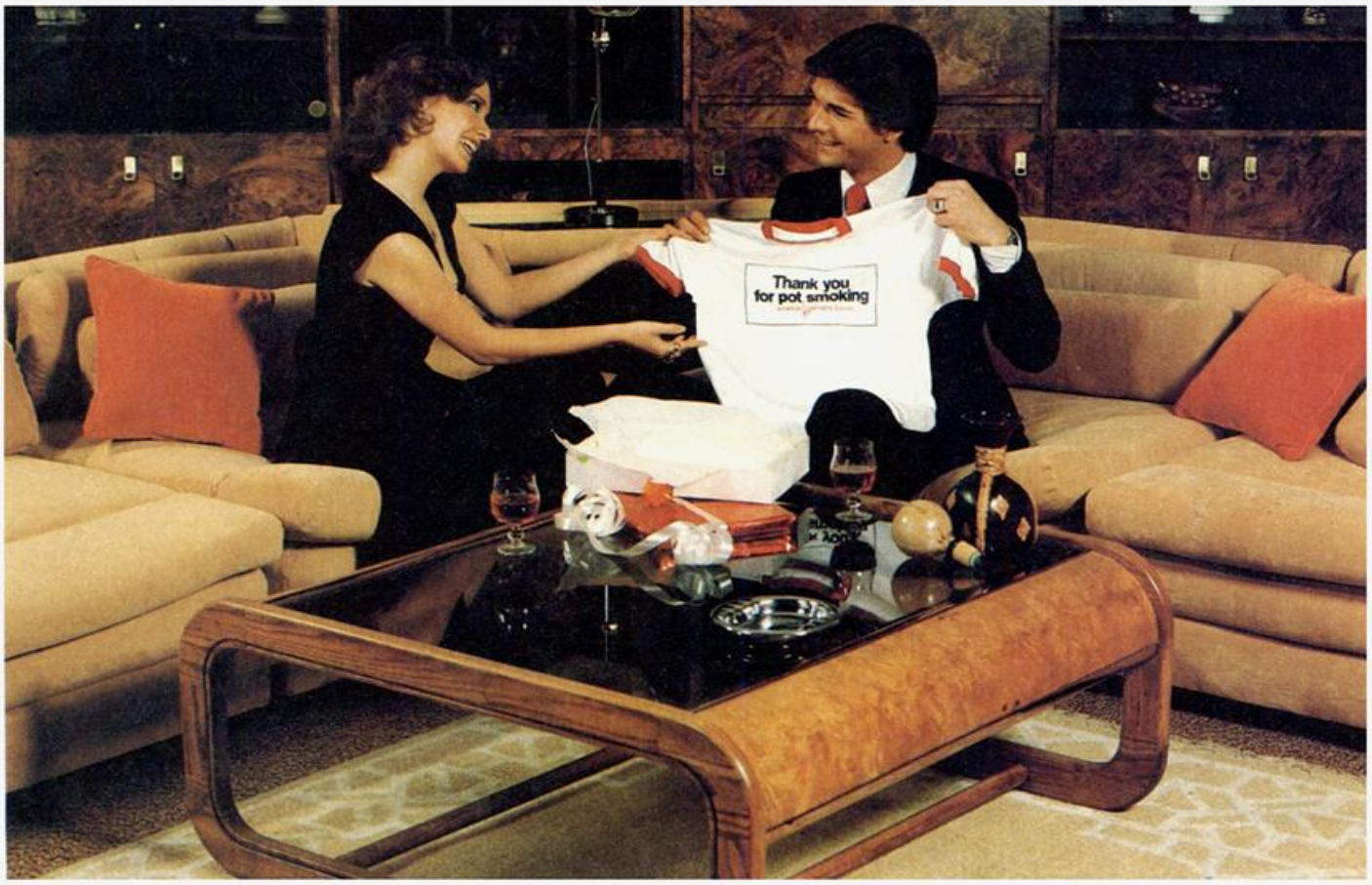

I KNOW! LET'S VACUUM THE RUG AND RUN THE SWEEPINGS THROUGH PHINEAS' MACHINE! WE'VE HAD THAT RUG FOR EIGHT YEARS! WE MUST'VE SPILLED POUNDS OF DRUGS ON IT!


HOURS AND HOURS LATER:
WELL, THERE'S A LITTLE GREEN, AND A TINY BIT OF WHITE, BUT MOSTLY WE GOT A BIG PILE OF YELLOWISH POWDER! WHAT DO YOU SUPPOSE THAT IS?
MUST BE ALL THOSE CANS OF BEER THAT GOT SPILLED!
THE END


HEY MA!
WHAT'S FOR BREAKFAST?
YEAH MA! WE WANNA EAT!
TODAY, IT'S
FLAMING CRASHES
WITH TINYTINOMIDE!
I KNOW YOU'LL JUST GO CRAZY OVERIT!
FLAMING CRASH
JUST WAIT 'TIL YOU TASTE IT! THIS NEW 'CEREAL' HAS ONLY 100% REAL INGREDIENTS...
RRRRIP!
AND IT TASTES SO GOOD! NOW WATCH WHAT HAPPENS...
IT TURNS INTO A CAR!
10:23 AM SAT. 26 JUNE CBS COMMERCIAL #14 FOR "WACKY RACES"
R'RRUMBLE!
VROOOOOOM!
WOW! A REAL CAR!
LOOKIT IT ROAR AROUND THE KITCHEN!
SCREEEEEEE
CRASH!
WOW!!! HOT "CEREAL"!
YES, IT'S SO GOOD!!! FLAMING CRASHES WITH TINYTINOMIDE HAS NO CALORIES OR VITAMINS! AND BEST OF ALL, EACH SERVING KNOCKS CHILDREN SILLY FOR SIX HOURS OF PEACE AND QOIET! BUY SOME FLAMING CRASHES 'CEREAL' TODAY!
WOTTA HIT!
GOOD SHIT!
FLAMING CRASHES


ZIPPY in UNCUSTOMARY BEHAVIOR
MAKE SURE HE'S GOT THE ROUTINE DOWN, NESTOR !!
OKAY--NOW, ZIPPY.. REMEMBER, WHEN WE GET TO CUSTOMS, YOU START RANTIN' AND RAVIN' ABOUT ALL TH' COKE AN' HASH YOU GOT ON YA, RIGHT? GOT THAT?
..THEN WE PASS THRU WITH TH' REAL STUFF DURIN' TH' COMMOTION!!
OH, YEH! YOU CAN TRUST ME, NESTOR !! BESIDES, HASH AND A COKE DON'T EVEN TASTE THAT GOOD TOGETHER!!
©1978 BILL GRIFFITH
SINCE YOU AIN'T ACTUALLY CARRYIN' NO DOPE, THEY'LL LET YOU GO.. THEN, YOU MEET US AT MOE'S DINER ON 11TH AVENUE !!
MOE'S DINER? HEY, WE COULD HAVE HASH AND PICKLES! THEY GO GOOD TOGETHER !!
FAR EAST
ALRIGHT, SIR, PLEASE OPEN YOUR LUGGAGE-- IS THIS THE ONLY PIECE YOU HAVE??
OH, NO!! I'VE GOT FORTY GALLONS OF LEBANESE HASH OIL AND A QUART OF SIBERIAN LSD IN MY SOCKS !!
HUH?
-AN' I ALMOST FORGOT! I PUT $5,000 WORTH OF COKE IN YOUR CAP LAST THURSDAY!! YOW!! YOU MUSTA USED IT!
..I SMELL SCALLIONS..
GIMME THAT!! STEP OUTTA LINE, YOU!! RIGHT NOW!
IT'S GOIN' GREAT, HUH, MR. "B."?
YEH!
CUT THAT OUT!!
..AND THIS SUITCASE CONTAINS TWO BLINTZES AN' A BUSHEL OF LITHUANIAN QUAALUDES!!
HEH HEH..
GOOD GRIEF!!
OKAY, MACK, NOW CALM DOWN !!
SOMEWHERE IN SUBURBAN HONOLULU, AN UNEMPLOYED BELLHOP IS WHIPPING UP A BATCH OF ILLEGAL PSILOCYBIN CHOP SUEY!!
PSST.. KEEP IT UP, ZIP!! YER DOIN' FINE!!
UNH!
HELLO, NESTOR !! IS IT TIME TO INSPECT YOUR TRUNK WITH TH' FALSE BOTTOM FULL OF DRUGS?!
WHA?
COOL IT, ZIP!
OH, JEEZ..
NP
HEY!
LET'S SEE.. WAS THE HASH ON TOP OF THE COKE OR WAS TH' COKE ON TOP OF THE HASH?
STOP HIM!! HE'S OBVIOUSLY A LUNATIC!!
HERE IT IS!! IT LOOKS LIKE FROZEN SPINACH, BUT IT'S IN DISGUISE !!
SNIFF--IT'S HASH ALL RIGHT!! HIGH GRADE TOO!!
OKAY, YOU GUYS!
UH---.
HEY, FELLAS!! I CHANGED MY MIND!! WHEN WE GET TO MOE'S DINER, I JUST WANT A PLATE OF LOBSTER 'N OATMEAL !!
THE END

THANK YOU . . .



. . . for giving a gift from the heart. express how you feel, show it up front!



Thank you for pot smoking

American Cannabis Society©

(ORDER FORM)

STYLE	QUANTITY S	M	L	XL	TOTAL
FRENCH CUT @ $6.00 WHITE 50/50					$
TANK TOP (Men) @ $5.00 LT. BLUE/DK. BLUE TRIM 50/50					$
TANK TOP (Women) @ $5.00 LT. BLUE 50/50					$
WHITE/RED TRIM @ $5.50 50/50					$
WHITE/BLUE TRIM @ $5.50 50/50					$
T-SHIRT TOTAL					$
+ $.50 POSTAGE/HANDLING FOR EACH SHIRT					$
TOTAL CHECK					$

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Master Charge No. _____

Visa/BankAmericard No. _____

Signature _____

(OR)

Order via Master Charge or Visa
call collect (608) 271-6330

ALLOW 4-6 WEEKS FOR DELIVERY
DEALER INQUIRIES WELCOME

Send Check, Money Order, Charge To: American Cannabis Society—T-Shirts P. O. Box 9683, Madison, Wisc. 53715

THE PLANET

New FBI Documents Reveal:

10-Year "Spy War" in Mexico

Recently disclosed FBI documents reveal that American undercover agents were intimately involved in all sectors of Mexico's government, politics and industry from the years 1970 to 1976, with the specific intention of "destabilizing" the Mexican social order. In addition, present reports from Mexico indicate that American military "advisers" have become embroiled in a Vietnam-like civil war being waged against peasant guerrillas in the Mexican south.

According to agency documents, declassified under the Freedom of Information Act, FBI Director J. Edgar Hoover was convinced in the early '70s that the Mexican government was riddled with "old communists and Communist Party sympathizers." In response, Hoover created a secret link between the American embassy in Mexico City and the U.S. Border Patrols in California and Texas in order to help "destabilize" the government of President Luis Echeverria.

Throughout the '70s, many Mexican government agencies, including the Gobernacional (International Security) were systematically infiltrated by FBI agents who reported to the legal attache at the U.S. embassy in Mexico City. Trade unions, in particular the powerful electrical and railroad unions, peasant confederations, religious organizations and student groups, were targeted as political enemies and infiltrated by U.S. spies. FBI agent provocateurs are credited with sabotaging a host of leftist conferences with Echeverria in an attempt to persuade the Mexican president that it was not wise to attempt a dialogue with "irresponsible" groups. Veteran communist leader and presidential candidate Valentin Campa had his day-to-day movements monitored for years by a U.S. spy posing as his closest adviser.

These activities the FBI documents openly admit. However, the same period of political and economic turmoil in Mexico saw countless mysterious bombings, kidnappings, murders and maimings, which certainly helped the FBI's plans to undermine the Echeverria administration. A 1973 memo from Hoover to the U.S. legal attache commends "the detonation of strategic and effective bombs" in Mexico City and "the wave of night machine-gunnings to divide subversive leaders."

On this side of the border, federal agencies in San Diego and San Antonio, through a "Border Coverage Program," infiltrated and disrupted Chicano student groups, political parties and community organizations, particularly around Tijuana and Ciudad Juarez. Agents regularly planted heroin, coke and grass on Chicano leaders "to put them out of order for a while." FBI operatives, according to agency files, organized leftist anti-Echeverria demonstrations in both the U.S. and Mexico, both to alienate Echeverria from the socialists and to "identify the most radical Mexican-Americans." Bogus articles calling on "patriotic" citizens to report subversive Chicanos to the U.S. Border Patrol were planted in border newspapers by U.S. agents. Other FBI memos order such tactics as sabotaging the cars of Chicano leaders.

Beyond alleviating Hoover's paranoiac fears of "pinkos" in the Echeverria cabinet, the American presence in Mexico is thought to have had definite economic motives. In the early '70s, Echeverria was forced to borrow a staggering $28 billion from the American-run World Bank and International Monetary Fund (IMF). However, the discovery of enormous petroleum reserves near Veracruz in 1974 increased the chances for Mexican solvency. When Echeverria refused to follow the World Bank and IMF plans for the exploitation of this oil, plans which would have given the energy-hungry U.S. a large supply of cheap fuel, Mexico was convulsed with a massive wave of labor unrest, terrorist bombings, political kidnappings and assassinations that continued unabated until his defeat in the elections of 1976. Jose Lopez Portillo, Echeverria's successor, has already instituted the domestic austerity program and oil-exportation policies designed by the World Bank and IMF.



Wide World



Wide World

Hoover and Echeverria—mortal enemies from "friendly" countries.

Meanwhile, continuing American intervention in Mexican internal affairs is strongly indicated in reports emerging from the war-torn jungles in the south. Unofficial sources say that American advisers are assisting Mexican mercenary soldiers in violent actions against peasant rebels. Both the government of Mexico and the U.S. Defense Department pointedly deny that Green Berets are involved in the unofficial repression campaign; however the same sources allege that helicopters given to the Mexican government by the DEA to spray grass fields with paraquat and other defoliants are also employed by private landowners to attack peasant revolutionaries with rockets, small-arms fire and napalm.

Political conditions in the four southern provinces—Michoacan, Guerrero, Oaxaca and Veracruz—are highly volatile, with over 50 percent of the land owned and controlled by property moguls. These landowners have been forced to hire professional *pistoleros* to guard their holdings from invasion by land-hungry peasants who are organizing into highly effective guerrilla units that threaten to match government forces in fighting strength.

The main peasant force, the Partida Proletario de Mexico (PPM), was formed in 1974. Last year, led by folk-hero leader Florencio Medrano Mederos ("The Blond"), PPM peasants launched over 1,000 recorded casualties. Mederos is now reportedly recruiting a peasant army composed of 20-30,000 mountain guerrillas.

Guerrilla leaders like Mederos are calling for Mexican-Americans and Yankee sympathizers to "protest imperialist military involvement here, like they did for Vietnam."

CIA's Deadly Drugstore Revealed!

by Martin Lee

WASHINGTON, D.C.—For nearly 30 years the CIA has been devising ever new and more effective ways of inducing psychosis in human beings through the use of drugs, newly declassified documents show. CIA theorists have invented detailed contingency plans for secretly dosing individuals and groups of people with substances that will provoke a broad variety of bizarre mental and physical symptoms. In the course of this program to create "exploitable alteration of personality" in unsuspecting persons, agency researchers have actually uncovered psychoactive plants and chemicals previously unknown to medicinal science.

A document dated May 15, 1951, reports on a top-secret meeting in which a group of CIA operatives discussed methods to lower a person's resistance to questioning. One agency scientist suggested that a subject could be debilitated by feeding him or her "a diet to which antivitamins had been added." The term "antivitamin" was never explained.

Exploring a similar theme, another document proposes using "dietary deficiencies as a possible weapon." Agency officials were enthusiastic about the idea of manufacturing "food which to all outward appearances would look and taste normal but would, in fact, be specially prepared (vital elements removed) and would create confusion, anxiety, fear, etc., in a prisoner or perhaps lower mental resistance, increase suggestibility or effect memory."

Another tactic promoted by the CIA relied on using "stomach tubes" as agents to assist in the interrogation of recalcitrant subjects. This technique involved "placing gas into a subject's stomach as a possible way to produce talk." Once pumped into the stomach, the gas would be absorbed into the body, prompting an appropriate physiological and behavioral response. And how would one surreptitiously slip a tube down the throat of the interrogation subject? This could "easily be accomplished with an unconscious subject," commented one CIA agent.



Ken Weiner

CIA officials displayed interest in any method that could facilitate behavioral anomalies. One report, for example, was titled "Twitches, Jerks, and Staggers—the Controlled Production Thereof." Such phenomena were looked upon as particularly suitable for certain covert operations. The agency determined that an untimely twitch, jerk or stagger could prove to be more advantageous in a given situation then, say, a chemically induced "headache cluster." Of course, the CIA also endorsed "the controlled production of headaches, earaches, or various pains," although such effects were difficult to control on a long-term basis with any degree of accuracy.

Throughout the 1950s and early 1960s, the CIA sent a number of scientists on fact-finding missions to various parts of the world in an all-out effort to gather as much data as possible on rare herbs and botanicals. The results of one such trip are recorded in a heavily deleted memorandum dated February 7, 1956, entitled, "Exploration of Potent Plant Resources in the Caribbean Region." The ceremonial drugs of the Dominican Republic and the "cerebral drugs" of the Virgin Islands and Haiti were described as "particularly promising sources for further study." Continued exploration of additional "natural potent resources" was also strongly recommended, especially with regard to "mushrooms and other fungi having psychogenic properties."

Among the numerous botanicals listed in this particular report, a few sound especially intriguing. A plant described by the CIA as a "stupid bush" *(Amaranthus spinogus)* was found to flourish in St. Thomas and Puerto Rico. Categorized as both a psychogenic agent and a pernicious weed, the effects of the "stupid bush" are shrouded in mystery.

The CIA also managed to discover something called an "information bush" *(Verbasina alata)*, which is listed as a psychogenic agent and then followed by a lingering question mark. What kind of information—prophetic or mundane—might be evoked by this particular herb is still unclear. Nor was it ever made explicit in the documents whether the "information bush" could actually be used as an antidote to counter the effects of the "stupid bush," or vice versa.

The social benefits of the CIA's behavior-control projects have been minimal. After all, at least the space program bequeathed us Teflon, the War in Indochina gave us Thai weed, and Korean influence peddling introduced us to the Moonies. But what have we gotten from the CIA labs at Langley, Virginia?

Vials Vials Vials

Popular ½ dram clear glass vials with screw tops...only $11.50 per gross. New! Rainbow colored ½ dram vials. Every color of the rainbow from emerald green and royal blue to ruby red and golden amber. 12 assorted colors. $3.00 per assorted dozen. Send check or m.o. to Natural Enterprises, P.O. Box 2044, Gaithersburg, Md. 20760 or call our 24 hour express ordering service at, 301-972-1130. Minimum order $11.50. Put some color into your cutomers lives.

GIVE BLOOD

Red Cross ✚ The Good Neighbor.



Mr. Slick's® "Combo" CANE-PIPE with stash cap

To the undiscerning eye, the "Combo-Cane Pipe"™ looks like an ordinary walking cane. It has a secret stash cap and makes into six different smoking pipes, complete with instructions and LIFE-TIME UNCONDITIONAL GUARANTEE!

Available in brown, black, white, afro, patriotic and stoned blind at your local store through most distributors.

By SLICK MFG. P.O. BOX 21392 CLEVELAND, OHIO 44121

High Timer Wins Pinball Tilt





Chip Berlet

Champion Lunceford takes a break to chat with emcee Gilda Radner while competitors pound machines in marathon pinball playoff.

by Chip Berlet

CHICAGO—**Not deaf, not dumb, only *mildly* far-sighted, 19-year-old Ken Lunceford plays the meanest pinball in the continental U.S.A. He proved it this spring, in the swanky Playboy Towers Disco Ballroom here, by dinging up 1,303,560 noisy points in four rollover games on a "Black Beauty" from Bally Pin-Ball, Inc. A devoted *High Times* reader, Lunceford rode back to the University of Georgia at Athens in his prize, a brand-new Datsun 280-Z, and immediately rearranged his dorm room to accommodate another winning: the same Black Beauty on which he had performed so magnificently.**

For the first eight hours it was touch and go for Ken. The competition commenced at noon, that being the final three-heat elimination stretch in the grand nationwide "Super Shooter Battle of the Pinball Wizards" sponsored by Bally. Twenty regional finalists from a starting field of 61,000 were flown into Chicago by Bally, provided with snappy personalized rabbit T-shirts from Playboy magazine and set up before 20 exquisitely matched machines. Leggy Playboy bunnies stood by with towels for the wiping of foreheads, palms and flipper buttons, and the tilt was on.

Ken Lunceford, though, never tilted once. That pinball gaffe was mainly committed by the uptight and supercompetitive older players, everyone over 21 being flatly eliminated by the end of the first 10-game heat. With the field whittled down to ten all-American kids, the 12-game second round was nearly mellow, the kids calling friendly insults back and forth and trading details of their machines' quirks.

As he went into the four-game final heat around 8:30 P.M., Ken was third in a field of four, somewhere between leader Dave Winkler (4,000,000 points in 22 games) and 11-year-old Jeff Cohen (2,700,000 points). For intermission, the Playmate of the Year shot two out of three balls with hockey star Bobby Orr on Bally's "Power Play" model, with the glowing picture of Bobby himself taking a nasty hip-check on its backboard.

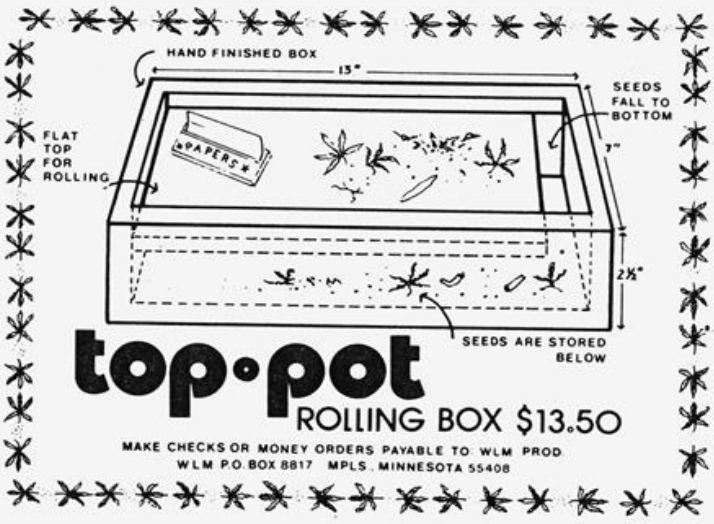
Then for Ken it was back to his faithful Black Beauty, with its own glowing backboard study of a lus-cious girl in deep-cleave halter and high-hip short-shorts. By this time he knew that machine like the inside of his mouth. Observing over the flash and clamor in the disco that leader Winkler had bottomed out early in his first game, Ken shook the sweat off his Beatlesque bangs and commenced flipping the gleaming ball straight at the tricky spinner spindle, ignoring the eight sure-point target squares. Though gut-wrenchingly dangerous, this tactic paid off with a supernatural 716,000 points on the third ball alone. By the time Ken's machine finally chalked up his legendary million-eight tally, even the bunnies were shrieking for him like cheerleaders. Then a couple of quips and a quick smooch from emcee Gilda Radner, and Ken zoomed back to school in his new car, with his machine to follow post-paid.

Next year's Super Shooter Battle, according to Bally, will include finalists from Europe and Japan; pinball wizards everywhere are just dying to come play in Chicago, home of the four major pinball manufacturers in the world.

Pinball Addictive, Professor Claims

A McGill University researcher warns that youngsters can become "hooked" on pinball machines in much the same way others are addicted to drugs or gambling.

David McKearnin, a specialist in addiction research at the Canadian school, says that his own observations of youths in penny arcades leads him to believe that many teenagers identify with the machines' flashing lights in the same way that, for example, a "workaholic" derives self-identification from work. McKearnin says that there is reason to be particularly concerned about "loner" types who obtain almost all of their daily pleasure from their interactions with the machines.



top•pot

ROLLING BOX $13.50

MAKE CHECKS OR MONEY ORDERS PAYABLE TO: WLM PROD
W.L.M. P.O. BOX 8817 MPLS., MINNESOTA 55408

THE BACK TO NATURE BONG © 78



HANDCRAFTED OAK, BIRCH, & MAPLE BONGS. WATER TIGHT, ALCOHOL RESISTANT FOR EASY CLEANING. For our catalog send. S/A, stamped envelope to. KUB ENTERPRISE P.O. BOX 1193, E.C. WISCONSIN 54701

North America

Satellites to Deliver Mail

The U.S. Postal Service will soon test the possibility of international delivery of mail via satellite. Postmaster William Bolger said the $895,000 project is entirely experimental so far and will involve transmission of dummy mail beginning in February 1979. Should the one-month trial prove successful, Bolger said, the Post Office will conduct a year-long field test with real mail. Letters will be scanned electronically and reproduced exactly as they are sent, bouncing off orbiting communications satellites.

The government claims coding will protect privacy. At the receiving point, the mail will be decoded and printed out in replicas of the original. Mail sent or received from overseas will be delivered to the addressee through the regular mail system, once it is decoded and printed.

Satellite Control

SACRAMENTO, CALIFORNIA—The state legislature here is currently considering passage of a bill that would require all heavy-energy appliances such as air conditioners to be fitted for remote-control. This would enable state utilities to forestall blackouts in critical energy situations by turning the devices off from a central utility installation—perhaps from a satellite in stationary orbit over California.

Abortion Clinic Firebombed

CLEVELAND, OHIO—In the most extreme of the recent series of nationwide attacks on abortion clinics, a man dressed as a delivery worker threw gasoline into the face of an operating-room technician at the Concerned Women's Clinic here, temporarily blinding her. Next he poured gasoline all around the outer corridor, lit it and fled. Sixteen patients were evacuated from the clinic's recovery room wearing only paper gowns. Such attacks have proliferated in recent months, ever since the National Right to Life Organization featured a workshop in "How to Disrupt an Abortion Clinic" at their annual national convention. Since local law-enforcement groups have been reluctant to investigate these attacks on their own, the alcohol, tobacco and firearms division of the FBI is currently investigating the atrocities.

U.S. Catholics Using Birth Control

PRINCETON, NEW JERSEY—The use of contraceptives has lowered the birthrate among both practicing and nominal Roman Catholics, a new Princeton study has revealed. Despite the Papal Encyclical of 1968 reaffirming the unreliable rhythm method as the sole permissible form of birth control, it appears that nine out of ten American Catholic women married less than five years are currently employing other methods of contraception. While fertility rates among all white American families began a steady decline in the early '60s to an average of 2.2 children per family, Catholic households in particular did not reach this figure until 1975.

Chicago FBI Still Watching "Subversives"

CHICAGO, ILLINOIS—The local office of the FBI here has been forced by claimants under the Freedom of Information Act to reveal that it maintains a file of nearly 7.7 million pages on "extremists and subversives." Monitored groups include the American Civil Liberties Union, the National Association of Social Workers, Jesse Jackson's PUSH self-help organization and the NAACP.

Police Hypnosis Squads Increase

by Joann Lawless

In the middle of a cold winter night the nares break in to arrest you as the prime suspect in an international cocaine deal. Groggily fishing for your First Amendment rights, you ask for the evidence. The cops tell you your roommate has been hypnotized three times by a shrink. She always was flighty and suggestible, but this evidence convicts you.

Scene from a grade-B Interpol movie? Not exactly. Police agencies, including the DEA, FBI, L.A. Police Department and the Treasury Department's Bureau of Alcohol, Tobacco and Firearms, have been increasingly employing hypnosis in their investigations.

Long taboo in the medical profession, banned by the AMA until 1959, hypnosis is being revived by cops, doctors and psychiatrists. Its actual mechanisms remain a mystery, and an insidious one at that. The legal value of information obtained from hypnotized witnesses is at best questionable, overshadowed by dangers of fantasized memories, mistaken impressions and deliberate lies, according to opponents.

A case in point is the trial and conviction of two Veterans Administration Hospital nurses in Ann Arbor, Michigan, for mass poisonings of patients. During the search for suspects the FBI hired an expert to hypnotize 14 patients who survived poisoning attempts.

One of the patients identified one of the nurses as being in his room just before he was poisoned. He was only able to identify her, however, after he had undergone hypnotism on three different occasions. The defense argued, reasonably enough, that so many attempts constitute brainwashing.

In California and Oregon, chapters of the American Civil Liberties Union are launching a major probe of L.A. Police Department methods, where hypnotism techniques were pioneered. Elsewhere, courts are weighing the validity of hypnosis-induced testimony. And, of course, journalists are occasionally duped by hypnotists, as was the claim of a well-known journalist who believed Uri Geller may have hypnotized him during a magazine interview.

Despite its dangers, hypnosis has never been more popular in the entire history of medicine, according to Dr. Herbert Speigel, a psychiatrist at Columbia University. Since 1962, Speigel has taught six-day hypnosis seminars to his peers. Over 200 physicians, lawyers and cops pay $360 to learn its secrets.

Speigel claims that 70 percent of the population is hypnotizable; others believe it to be 95 percent. Of these, about 15 percent are "highly susceptible." According to Speigel, "The very susceptible person is usually the imaginative type, bright, easygoing. He is the dreamer who can get so absorbed in what he's doing that he can lose awareness of where he is... he sometimes spaces out in that sense."

Meanwhile, cops continue to use hypnosis until the courts forbid them. As one expert put it, "Hypnotism is a wild variable. It is dangerous and belongs in the parlor in the same way you would want an atom bomb there."

CIA Gets TV Show



Gordon Mclendon

WASHINGTON, D.C.—Texas millionaire and ex-CIA spy Gordon Mclendon and his erstwhile agent sidekick David Philips are negotiating with the agency's director Stansfield Turner to produce a television series extolling the glories of the CIA. Much in the same way that the old Efrem Zimbalist "FBI" series was cleared by J. Edgar Hoover's office, Mclendon promises to clear every script with the CIA for "possible security breaches." While the agency is officially noncommittal, Turner has lauded the ex-spooks' "very positive approach."

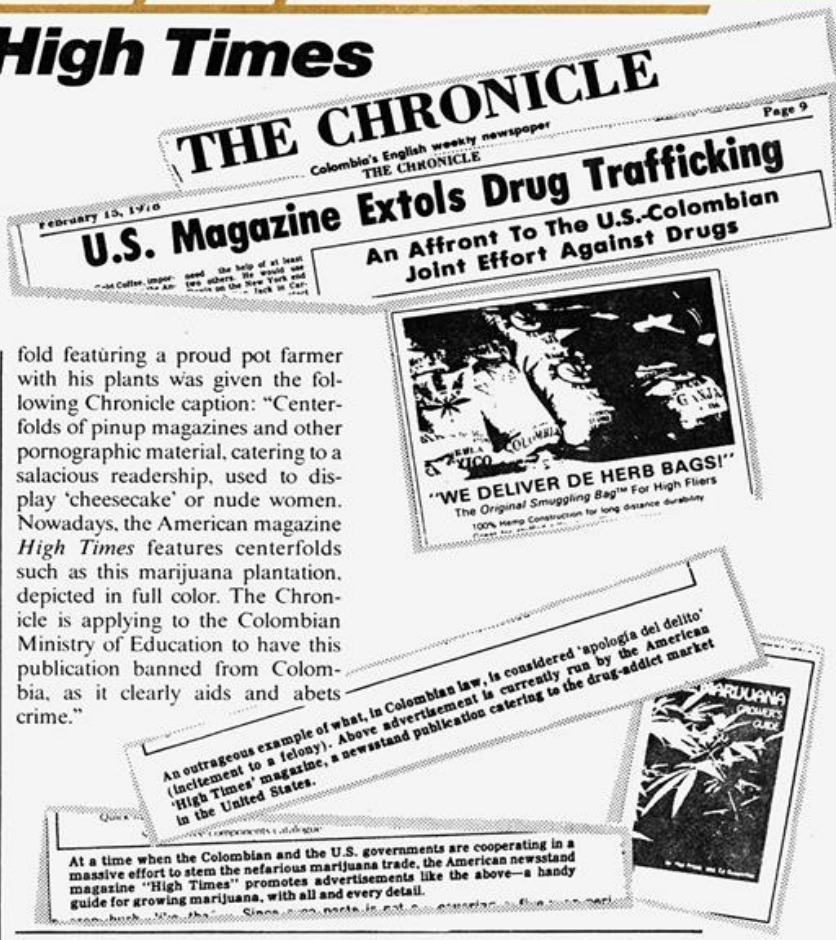
Narc Press Blasts *High Times* in Colombia

CALI, COLOMBIA—A pro-narc weekly here recently attacked *High Times* magazine and freedom of the press in America. The front-page blast entitled "U.S. Magazine Extols Drug Trafficking" may be the first shot in an antimarijuana offensive soon to become a full-scale propoganda war against the U.S. The article appeared in the English-language Chronicle this spring, at a time when the violence of Colombia's blitzkrieg against pot was matched only by the remarkable supply of top-notch weed pouring into the U.S. from the Guajira Peninsula.

The Chronicle's content and style strongly suggest that the staff is comprised of people on the payrolls of various U.S. and Colombian drug, spy and police agencies.

Calling *High Times* "an affront to the U.S.-Colombian Joint Effort Against Drugs," the paper printed without revision an excerpt from Robert Sabbag's *Snowblind*, lately serialized in the magazine, that described several ploys smugglers have used to get cocaine out of Colombia. The Chronicle's comment: the piece was "published in *High Times* to incite drug trafficking in Colombia."

A reprint of a *High Times* centerfold featuring a proud pot farmer with his plants was given the following Chronicle caption: "Centerfolds of pinup magazines and other pornographic material, catering to a salacious readership, used to display 'cheesecake' or nude women. Nowadays, the American magazine *High Times* features centerfolds such as this marijuana plantation, depicted in full color. The Chronicle is applying to the Colombian Ministry of Education to have this publication banned from Colombia, as it clearly aids and abets crime."



"Americans Are Corrupting Us"

Colombian Honchos Gripe

BOGOTA—"Why is it so difficult for the U.S. to stop cocaine entering its territory?" asked President Alfonso Lopez Michelsen angrily, when American reporters charged that some $6 billion in coke passes into the U.S. every year from his country. The Colombian government has been increasingly defensive and image conscious on the subject of coke ever since President Michelsen sacked two of his closest cabinet aides for "governmental improprieties."

The two ministers were dismissed amid press charges that they were deeply involved in the export of snow, but Michelsen later insisted that both had been mistaken by the press for Colombian "gangsters" with similar names. A number of ranking Bogota police figures have also been implicated in the international snort scandal, prompting Police Chief Guillermo Leon Linares to claim that they had been "corrupted with the dollar bait offered by drug traffickers." The police chief concluded: "We are not corrupting the Americans, the Americans are corrupting us."


Wide World

Michelsen: "We're innocent!"

Colombians Insult Reds

BOGOTA, COLOMBIA—A minor international fuss exploded at Campi Stadium here over the start of a "friendly" football match between the top Colombian team and the Peoples Republic of (Communist) China team. After concluding the Colombian national anthem, the brass band of the Colombian Military Police broke into an off-key rendition of the *Nationalist* Chinese anthem. Chinese officials upbraided the orchestra, which quickly exited the stadium, and the game commenced only after a long and uneasy delay. The incident recalled an earlier Colombian *faux pas*, when former President Guillermo Leon Valenci toasted visiting French premier Charles De Gaulle with the expression "Long live Spain!"

Chile Today, Dead Tomorrow

SANTIAGO, CHILE—A wild party here carried on for well beyond two days straight before the merrymakers discovered that a guest dozing in a corner, one 35-year-old Jose Huenchupan, was in reality as dead as Salvadore Allende. The party continued another 24 hours nonetheless before the corpse was reported.


CRYSTAL PRISMS
Strass Leaded Glass Crystals from Austria
Over 75 sizes and shapes
Send for retail catalog.
(Wholesale customers enclose resale #.)
LAFFERTY Import Co.
P.O. Box 977 Dept. A
Boulder, Colo.
80306

WISHSPOON™
Now — our exclusive WISHSPOON can get you there fast . . . *twice as fast*, to be exact! This smartly-styled pendant is not only a super conversation piece, it does a *double duty* with its two spoons. Just fill both bowls — and one sniff does it all!
ORDER TODAY — We Pay Postage
(Note: chain not included)
■ STERLING SILVER $29.95
■ GOLD-FILLED 29.95
■ 14 KARAT GOLD 49.95
Send Check or Money Order to:
IDEA CONTEMPO P.O. Box 81, El Segundo, Ca. 90245

Running Anisette in the South of France

by Maxine Feifer

You answer the knock at the door of your house in southern France, and a dark-eyed lady is standing there, dressed in long skirt and flowered blouse, a paisley scarf over her hair and a basket of lemons on her arm: perhaps you would like to buy some lemons? But if you look like the right type to her, the lady may push aside the lemons and show you what she is really selling: little flasks filled with green liquid. This is extract of *pastis*, the base of anisette liqueurs (like Pernod), and it is contraband.

Homemade pastis—you mix the extract with crude alcohol, leave it for a few days and *voilà*—is a traditional aperitif of the Mediterranean region, more common than the martini in America. Southern France is wine-making country, and every year each vintner used to receive 10 liters of free crude alcohol from the communal distillery when he or she delivered grapes. Twenty years ago the French government ruled to discontinue this practice—anyone who bought or inherited a vineyard would not be buying or inheriting the right to free crude alcohol, too. Those already entitled to it, though, would continue receiving it all their lives. So nowadays it's mostly the older vintners who enjoy this privilege. There's no other way for a private individual to obtain crude alcohol legally in France; although, as with everything else, there are other ways of getting it.





Harold Chapman

A Marseillaise gypsy undersells the local vinter (right).



Harold Chapman

The pastis black market—it travels in gypsies' fruit baskets.

A bottle of commercial pastis at the corner grocer's costs about 40 francs ($8), with 35 francs going for tax. The little bottles of contraband, though, are sold for only 10 francs apiece. The buyer enjoys a 75-percent discount. The retail seller, whose raw materials cost about 5 francs a bottle, makes 100-percent profit. Everybody is happy.

The pastis extract is smuggled into France not from Algerian basements or Spanish mountain hideouts, but from factories in Switzerland, where it's not taxed. It comes in 100-kilo drums concealed in cars and trucks. After passing through the hands of a couple of middlepersons, it goes to the retailers, who siphon it into 10-gram flasks, adding colorant (green, yellow or chestnut brown) and water. In fact, as one disappointed customer reported, they sometimes leave the extract out, so it's apparently wise to uncap every flask purchased and sniff it to be sure.

Usually, you buy extract of pastis from a gypsy. In some villages, the pastis gypsy will be a young man, identifiable by a strong aroma of bleach (he's soaked his shirt in it to conceal the perfume of anise). But most often, the seller is a woman, concealing her wares in a basket of fruit or garlic—sometimes even eels. As a customs man comments, "With gypsies, the women do the work and the men do the thinking." Besides that, he adds, gypsy women have lots of kids, and they know that a judge will be unlikely to impose a heavy sentence on a mother.

But as the old vintners die off, and as the price of flasks, food dyes and Swiss extract mounts, the pastis gypsy and her resourceful mate will probably have to turn their talents elsewhere, and the anisette lover will be obliged to buy over the counter at the town cafe.

OPIUM POPPY SEEDS

the real thing! FERTILE
300 seeds for $3.00

MORNING GLORY SEEDS
HEAVENLY BLUE
$4.00 per oz. $14.00 for 4 oz.

BABY HAWAIIAN WOODROSE
20 seeds for $3.00

LOPIUM* BRAND *wild lettuce extract $2.00 gr./$3.00 ge
MANY HERBS AVAILABLE; INFO SENT WITH 1st ORDER
MINIMUM ORDER $3.00
MONEY ORDER FOR FASTEST DELIVERY
Send to: REAL CONCEPTS, BOX 30593
SEATTLE, WA. 98103 dealer inq welcome

NEW!
ROCK/CRYSTAL incense $4.95 wt.
Like the real thing!
contains PROCAINE HCL
if inhaled or ingested, may cause stimulation, excitement, or other toxic reaction. not intended for drug use.

LUDES FOR SALE



Now you can sleep on LUDES every night, with a soft 714 pillow hand made with Luxurious Satin.
A Great gift idea!

Send $8.95 Check or money order to:

PILL-O
2174 N. Beverly Glen Blvd.,
Los Angeles, CA 90024

Please add $1.25 postage & handling
California residents add 6% sales tax.

Smallpox Dead?

THE HAGUE, NETHERLANDS—The last person ever to have smallpox recovered from it last October in Merka, Somalia. According to the World Health Organization, the disease, which regularly decimated whole human populations every few generations from the time of the pharaohs to 100 years ago, will officially be considered extinct if no new cases arise in the next two years, the longest possible time a smallpox virus might exist latent in a human host. WHO warns that the only conceivable source of smallpox infection after that would be from laboratory specimens; they recommend that only 200 million doses of smallpox serum be maintained under maximum security.

Gary Davis—Prince of Peace or International Con Artist?

An international warrant has been issued for the arrest of Gary Davis, the 57-year-old president of the World Service Authority. The WSA, founded 33 years ago in France, distributes international passports to stateless people or anyone else interested in joining the world community.

Davis, an American, was found guilty of selling thousands of bogus world passports, many of them to immigrant workers who paid from $25 to $50 for what they thought was the real thing. Although Davis's passports have no true international validity, they look so real that they have been successfully used to gain entry into a number of countries, notably in Eastern Europe. Davis claims that 28 countries actually recognize his passports.



Wide World

Gary Davis in Paris.

Italy's Reds Lash "Sesame Street"

The airing of "Sesame Street" on Italian National Television has spurred left-wing circles to protest the show as a scientific attempt to foist American values and models on the rest of the world.

The introduction of the popular children's educational program into Italy came at a bad moment—just in the wake of an unpopularly received U.S. State Department declaration opposing communist participation in Italy's government.

"A show that was strictly pedagogical in nature coming from the United States should not have been programmed for the same month in which the president of the United States tried to paternalistically teach the Italians how to make good government and how not to make a bad one," educational expert Umberto Eco pointed out after the show was aired in Rome.

Controversy over exporting "Sesame Street," which has appeared in 90 countries renamed "Bonjour Sesame," "Sesamistrasse," "Plaza Sesamo," "Villa Sesamo" and in Italy "Sesamo Apriti," has not been limited to Italy. The late President Salvador Allende opposed introducing it into Chile. The Soviet Union dubbed it a means of cultural imperialism. The British thought it too condescending to children, who remained too passive after watching the program.

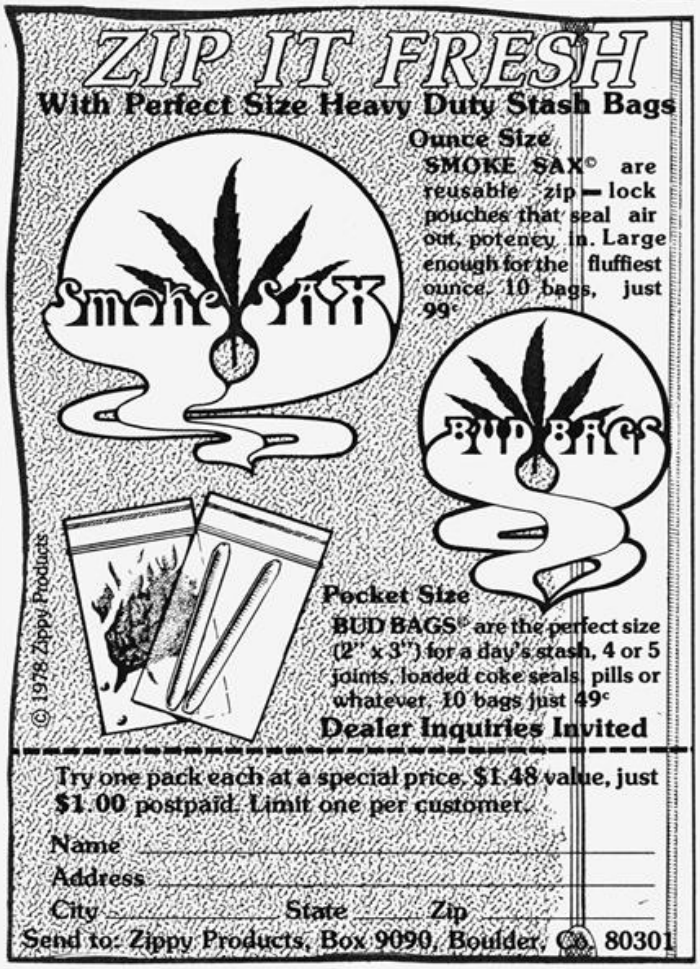




Nelle

Lady Zorro Raids German Sex Shops

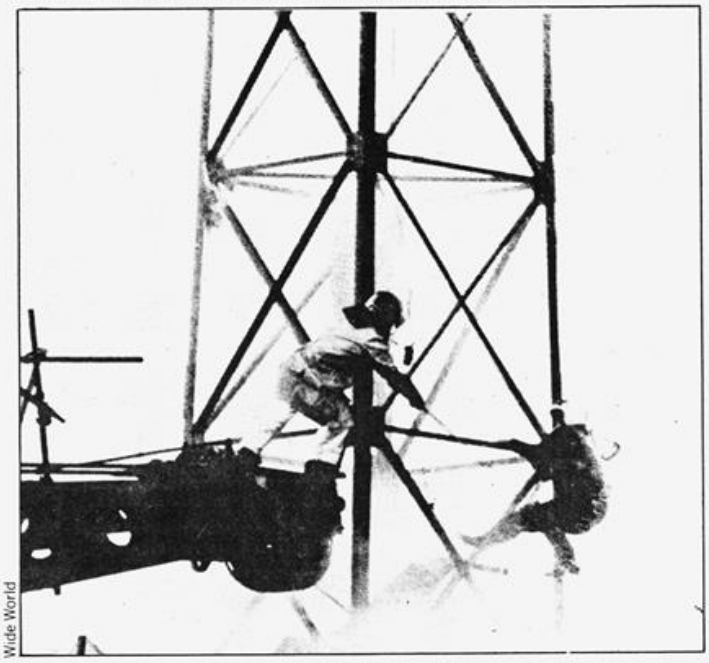
COLOGNE, GERMANY—Sex-shop owners here have pooled a $1,500 reward fund for information leading to the capture of "Red Zora," a woman who bills herself as a female Zorro in her robberies of pornography and sexual paraphernalia. So far, Zora has stolen nearly $50,000 in sex goods from porn boutiques, leaving leaflets asserting that "love today is nothing more than the domination of women by men" and "the pornographers want to use our bodies to make their profit." She signs herself "Red Zora, Avenger of the Oppressed."



Popular Violence Shuts Supersonic Airport

NARITA AIRPORT, JAPAN—Turmoil and violence have impeded for months the opening of this new superairport 41 miles north of Tokyo. Last spring the entire six-story conning tower was pulled down by demonstrators, and the main terminal has been firebombed regularly by as many as 20 Molotov cocktails at once. A variety of groups oppose the opening.

Local farmers resent having to sell their land to facilitate Narita's continual expansion; environmentalists condemn it as an ecological holocaust; and young militants are convinced it's really just a camouflaged military base. Notoriously ferocious and inventive in recent pitched battles with police, the militants have taken to using electrical "harpoons"—metal lances filled with dry-cell batteries, transformers and condensers that can send a 5,000-volt shock through a policeman's metal shield.



Wide World

Japanese militants demolishing the Narita conning tower.





Wide World

Enraged farmers battle Japanese state police.

India Sues 100 U.S. Drug Companies

NEW DELHI—The Indian government is officially suing nearly 100 United States drug companies for extravagantly overcharging Third-World nations. The suit was brought in response to a World Health Organization study revealing that American drug corporations, which control 90 percent of the legal drug trade in developing nations, were merchandising the same varieties of drugs under a bewildering array of brand names. This enables the companies to charge different prices for similar quantities of drugs. Bristol-Meyers, Squibb, Upjohn, Pfizer, American Cyanamid and Olin were cited as the major culprits. In the developed nations, drug costs run to about 25 percent of the health budget; in the Third World, drugs amount to some 60 percent of the budget. The drug multinationals are estimated to sell over $6 billion a year to developing nations.

Soviets Get Sex in School

The Soviet Union has announced the introduction of sex education courses in all institutions of learning, from grade schools to universities, for the first time in its history.

Admitting, "we have no experience in this kind of thing," Professor D. Valentey of Moscow's Population Department said that Soviet sociologists and teachers had to first put in a lot of time studying "the right way to promote this education." Valentey, who is a member of the Soviet Presidium, says the courses were introduced "as part of an overall health program for young people to assist better marriages in our country."

The state is also starting marriage bureaus in a number of major Russian cities where lonely Soviets can meet, mingle and possibly mate. According to statistics just published, there are more than 20 million unmarried people in Russia between the ages of 20 and 40.

Japanese Lure UFOs

HOKKAIDO—The Japanese are attempting to lure UFOs to their shores by flashing red, white and blue spotlights into the sky while playing the soundtrack from *Close Encounters of the Third Kind.* So far, no extraterrestrial creatures have landed.

Third-World Solar Energy Seen

TOKYO—"In the rural communities of the developing world, inexpensive, easily installed solar energy devices could have an immediate impact on the quality of life," observes the United Nations University, which has headquarters here. According to Dr. James J. Hester, U.N.U.'s rector, the strongest possibilities for the global development of solar power lie in the earth's equatorial regions, because available sunshine is so plentiful and intense and because the industrial development of most equatorial nations is rudimentary enough to enable solar programs to get a start.

"The advanced nations concentrate on very high-cost, complex energy projects," Dr. Hester points out. "Little attention is paid to low-cost applications in poor countries." Accordingly, U.N.U. has contracted recently to develop a model solar village in Algeria and a system for solar electrification of rural hospitals in Iran. Formerly the president of New York University, Dr. Hester considers that the installation of solar industrial systems can proceed more swiftly in countries where old-fashioned petroleum and coal industries will not economically impede solar projects.

CIA Plutonium Poisons the Ganges

NEW DELHI, INDIA—Convinced that the waters of the Holy River Ganges have been polluted for the last 15 years by deadly radiation from a lost American spy device, devout Hindus have been rioting in the streets all summer. The panic has presented the government of Moraji Desai with its most serious political crisis so far.

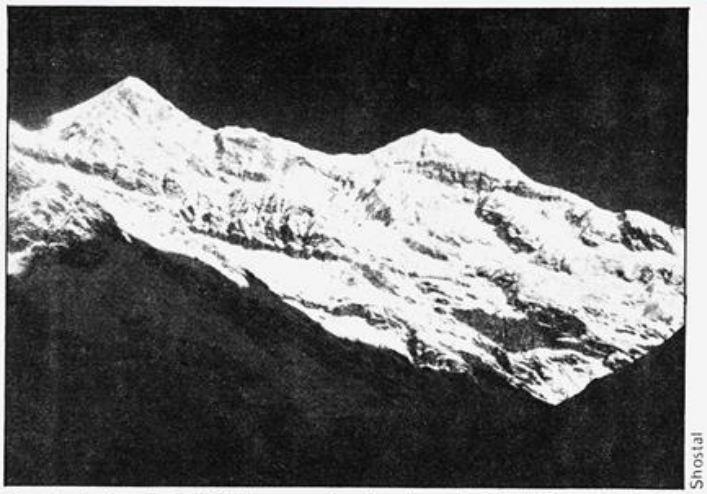
In the early '60s, in an effort to monitor H-bomb tests in the People's Republic of China, the American CIA determined to place a radar device at the 52,000-foot summit of Nanda Devi, which affords scanning access to Sinkiang Province beyond the eastern side of the Himalayas. In 1964 six veteran CIA mountaineers were helicoptered to a base camp 14,000 feet up Nanda Devi, code-named "Blue Mountain."

Although the mountain had been scaled only twice before, the Americans began their ascent laden down with all the equipment of an unmanned radar station—including a deadly reactor fuel core of plutonium 238—and accompanied by several Indian intelligence agents (who were very amateur climbers). Internal squabbles and near disasters impeded the mission for weeks, and when the climbers were still 2,000 feet short of the summit the weather turned bad and the project had to be abandoned. The radar equipment, with the lightly shielded plutonium included, was stashed in an ice crevice.

In 1966, the spy climbers battled back up Nanda Devi to the same spot—and they discovered that an avalanche had carried the entire apparatus some indeterminate distance down the slopes. In a panic, the CIA bought up miles of rubber tubing in New Delhi, launched a *third* ascent and had the mountain hosed down for weeks in a futile attempt to retrieve the plutonium. With a half-life of 250 years, the missing device could conceivably contaminate a whole lot of snow: and it is from precisely this section of Nanda Devi that the melted snow collects to form the headwaters of the Holy Ganges, in which millions of Hindu pilgrims ritually bathe.

Eventually the CIA gave up hope of finding the reactor and shamefacedly closed the Blue Mountain project. Incredibly though, when in 1967 the Chinese fired off their first modest ballistics missile in Sinkiang Province, the CIA did it *again!* This time the mountain chosen was 21,000-foot Mondo Kot, code-named "Red Mountain," and the mission—unencumbered by amateur Indian sleuths—succeeded. The device is still up there, scanning away dependably, even though within three years after its installation it was rendered wholly obsolete by spy satellites placed in stationary orbit over China.

The revelation that the possible 500-year radioactive contamination of the Holy Ganges was carried out with the knowledge and participation of the Nehru government has severely embarrassed President Desai, a Nehru protege. And it has provided the lately discredited radical supporters of ex-President Indira Ghandi with their first solid political ammunition since the end of emergency rule.



Shostal

Nanda Devi—crippled CIA spy probe drenches the 52,000-foot peak with radioactivity.

ROLLING PAPER...
BUY A BOX AND
SAVE A BUNDLE!

Tired of going to the local head shop to blow up to 75¢ just for a pack of papers? Now you can buy direct and save. Buy a box! You can get top brands for **AS LITTLE AS 10¢ A PACK.** Having a box is great. No more running out at parties or searching all over for your pack. Keep 'em on you, in your car, give one to a friend, or use them to close a deal (you can at this price.) They make great gifts too! **SEND IN YOUR ORDER NOW!!!**

	Packs Per Box	Price Per Box
ACAPULCO GOLD (RICE)	100	$10.00
BAMBU	100	10.00
BIG BAMBU	50	10.00
BLANCO NEGRO	100	12.00
CANNIBIS INDICA	100	15.00
CLUB - GLUELESS	60	12.00
EZ WIDER (RICE)	50	9.00
EZ WIDER (BANANA)	25	6.00
EZ WIDER (STRAWBERRY)	25	6.00
EZ WIDER (CANNABIS)	25	6.00
EZ WIDER (1½)	24	6.00
JOB DOUBLE WIDE	100	17.00
INSTA ROACH (Try It!)	40	14.00
JOB DOUBLE WIDE (WHEAT)	100	20.00
JOB (1.5)	100	18.00
JOB (1.5 - STRAWBERRY)	100	20.00
JOKER	25	6.00
LEAVES	50	7.50
ONE & A HALF	100	19.00
REEFER ROLLER	100	17.00
REEFER ROLLER (CANNABIS)	100	20.00
REEFER ROLLER (WHEAT)	100	20.00
ROACH	50	9.00
ZIG ZAG (RICE)	24	5.00
ZIG ZAG (WHEAT)	24	5.00
ZIG ZAG KUT KORNER SLOW	50	9.50

*You must be over 21 to order.

Send Check or Money Order. Add $1.00 per box for handling and postage. (N.Y. Residents add 7% Sales Tax.) Mail to:
PAPER PLACE, P.O. Box 755, Dept. B, Huntington, N.Y. 11743



NEED NEW IDENTITY?

THE NEW PAPER TRIP helps you:
Change your name, age • Cover bad records • Create new "backgrounds" • Get diplomas, degrees, govt-issued ID

THE NEW PAPER TRIP tells HOW:
- Using aliases safely • Best sources of private ID
- "Take-over" ID • Fake ID and the Law — state & federal
- Producing your own ID • "Official" stamps
- Pros & cons of stolen, forged, and counterfeit ID
- Drivers license number codes for all 50 states
- Social Security codes — using them for "backgrounds"
- Passport frauds • Military SPN (discharge) codes
- Changing your name legally in each state
- Legal name changes without going to court
- Disappearing with legal name changes — it CAN be done!

All this — and LOTS MORE — in the 1977 Edition of
THE NEW PAPER TRIP only $14.95

FREE with purchase: "100 WAYS TO DISAPPEAR AND LIVE FREE" (Reg. $2)

YES! Send me THE NEW PAPER TRIP, plus a free copy of "100 Ways to Disappear and Live Free". Please send to:

NAME _____

ADDRESS _____

CITY _____ STATE ____ ZIP _____

EDEN PRESS • Box 8410-HN• Fountain Valley, CA 92708

Australia



Wide World

Premier D.A. Dunstan: politically unreliable by police standards.

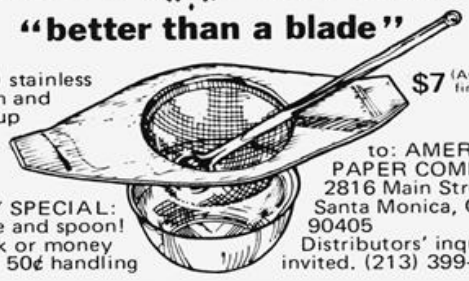
Premier and Wife Listed on "Enemies List"

The state of South Australia is boiling with a spy controversy. Much of it started when Premier D.A. Dunstan, head of the state, revealed that South Australia's "special branch" of the police was holding files on as many as 30,000 people considered to be politically unreliable. This is a sizable number considering that the entire population of South Australia is only slightly over one million.

An investigation into state security revealed that these 30,000 names included not only large numbers of entirely innocent people but also Premier Dunstan and his new Chinese wife. At this point, South Australian chief of police Rolfe Salisbury, who heads the special branch, made it clear that he considered Dunstan a political risk and refused to make the files accessible to him. Salisbury was immediately fired, but, with one out of every 30 South Australians branded "unreliable," the public stir continues.

no strain snow strain

"better than a blade"



All (100%) stainless steel screen and seamless cup with glass pestle (a complete kit.)
HOLIDAY SPECIAL: Free bottle and spoon! Send check or money order with 50¢ handling

$7 (Available at fine stores.)

to: AMERICAN PAPER COMPANY, 2816 Main Street, Santa Monica, Ca. 90405
Distributors' inquiries invited. (213) 399-9292

Physicians Desk Reference

ATTENTION PHARMACEUTICAL LOVERS
NEVER BE BURNT AGAIN

The **1978 PDR** has detailed information about your favorite pharmaceutical including usage, dosage, warnings, adverse reactions and side effects. 1000 life size color photos.



Sold elsewhere for up to $40.00. RUSHED to you for only $19.95. Postpaid, send check or M.O. to:

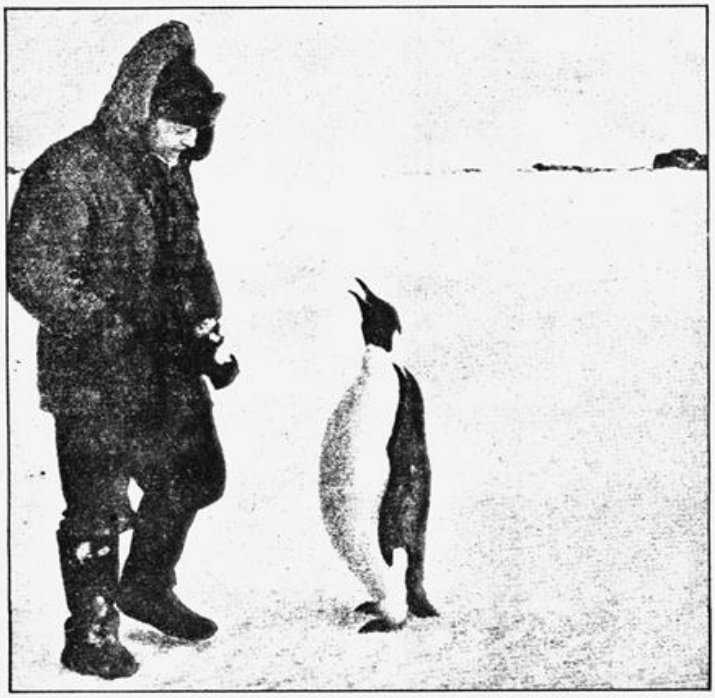
CHEMICAL INDEX
Box 4145, Dept. H36
St. Paul, MN 55104
(612) 645-2813

This is the same hardcover book your doctors uses, 32nd edition.

Drink or Swim in Truk Islands

TRUK ARCHIPELAGO, THE PACIFIC— Exercising their newly won right to vote, Truk women this year banned all alcoholic beverages. They achieved this by scheduling the temperance referendum to fall on a payday, when most of the Truk men were too involved boozing it up after work to get out the vote. Now Truk men have to paddle miles to the neighboring Moen Islands to score any liquor.

Antarctica

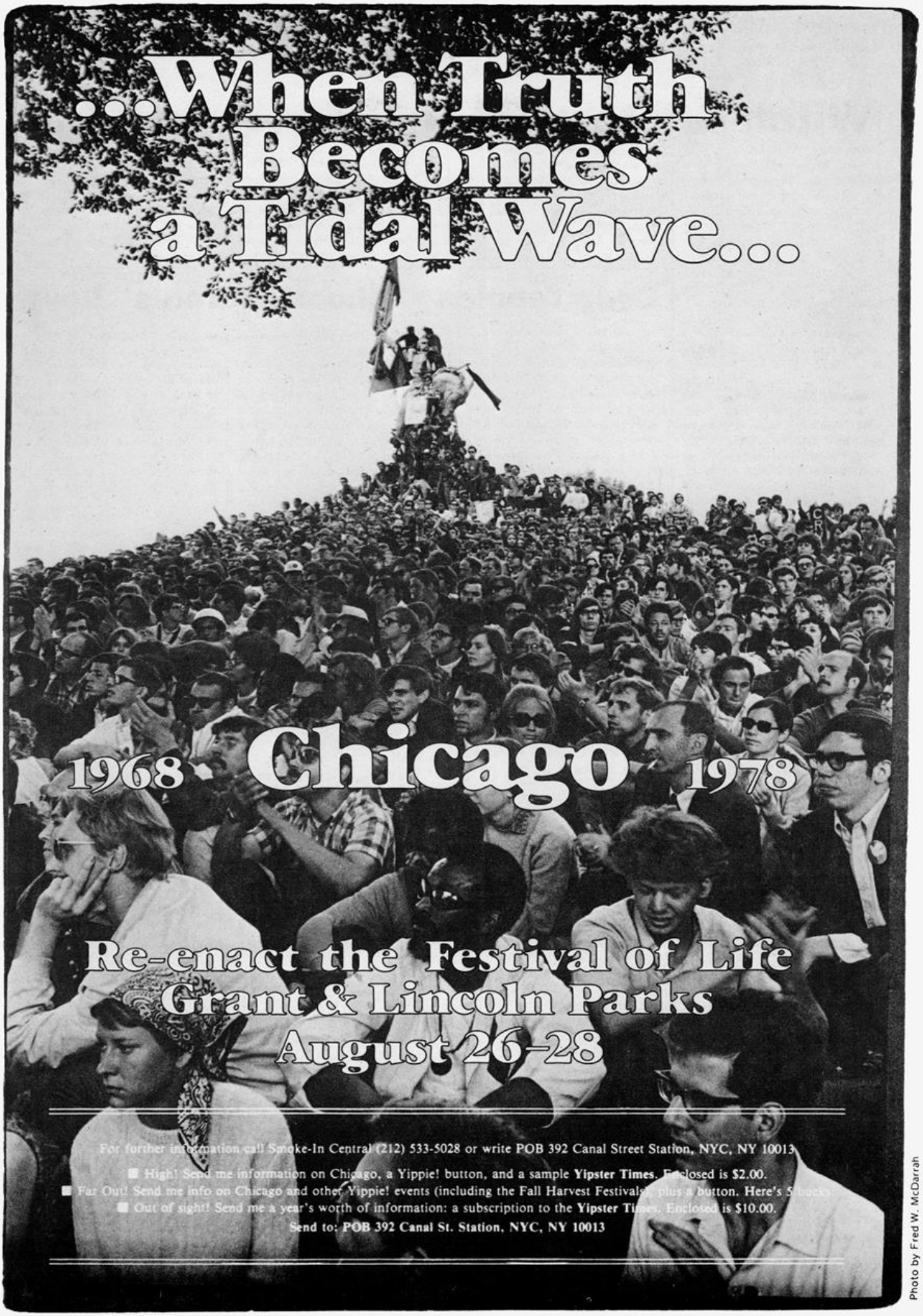


"Their verbal skills are simply amazing," says polar researcher Ernst Penumbra, who has lived with and studied a group of penguins for the last 33 (lonely) years. Penumbra has taught a form of "language" to three of the five penguins he has raised from birth, including his favorite, Ruthie, who he proudly boasts can ask the question "Cold enough for you?" in over 35 discrete inflections, each with its own shade of meaning. Penumbra is pictured here with Ruthie in their performance of Waiting for Godot *at the Admiral Byrd Theatre-in-the-Round.*

EXOTIC UNTREATED TRIPPY GARDENING SEEDS

Baby Woodrose Seeds (Argyreia Nervosa)	1 Gram (10 Seeds) $1.50		1 Oz. (280 Seeds) $24.53	
Morningglory Seeds "Heavenly Blues" (Ipomoea Violacea)	9 Grams (270 Seeds) $1.50	1/4 Lb. (3375 Seeds) $10.80	1/2 Lb. (6750 Seeds) $18.00	1 Lb. (13500 Seeds) $30.00
Hops Seeds (Humulus Lupulus)	4 Gram (100 Seeds) $1.50		1 Oz. (7000 Seeds) $13.50	
Wild Lettuce Seeds (Lactuca Virosa & Scariola	4 Gram (600 Seeds) $1.50		1 Oz. (42000 Seeds) $23.58	

NEW CATALOGUE – 25c
FREE PACKET OF TOBACCO SEEDS WITH EVERY $5.00 OR MORE PURCHASE!
HISTORICAL AND PLANTING INFORMATION INCLUDED AND WE PAY ALL POSTAGE!
All the above items guaranteed genuine and legal!
Texas residents add 5% sales tax
Send cash, check or m.o. (U.S. Currency Only) No C.O.D.'s.
SWAMP FOX HERBS
P. O. Box 66133
Houston, Texas 77006
(Dealers Inquiries Welcome)


...When Truth Becomes a Tidal Wave...
1968 Chicago 1978
Re-enact the Festival of Life
Grant & Lincoln Parks
August 26-28
For further information call Smoke-In Central (212) 533-5028 or write POB 392 Canal Street Station, NYC, NY 10013
■ High! Send me information on Chicago, a Yippie! button, and a sample Yipster Times. Enclosed is $2.00.
■ Far Out! Send me info on Chicago and other Yippie! events (including the Fall Harvest Festivals), plus a button. Here's 5 bucks.
■ Out of sight! Send me a year's worth of information: a subscription to the Yipster Times. Enclosed is $10.00.
Send to: POB 392 Canal St. Station, NYC, NY 10013
Photo by Fred W. McDarrah

Africa

Witch Doctors Licensed in Swaziland

SWAZILAND—Witch doctors in this southern African nation have been accorded equal professional standing with Western-based medical practitioners. King Subhuza formally ordained a government council of traditional healers, entrusted with developing a code of witch-doctor ethics and professional regulations, after the U.N. World Health Organization recommended broadening the global definition of "physician" to include tribal healers, birth attendants and herbalists.

"Most traditional healers are thoroughly trained, and they form the essential core of primary health workers for nine-tenths of the rural populations of the developing countries," the WHO study noted.

European and American medical organizations have vigorously denounced the notion of approving tribal healers as physicians, but many African nations are currently following the lead of Zambia, where witch doctors have been accredited for years. The Nigerian government is establishing an entire witch-doctor college in Lagos.

The U.N. is currently underwriting several interdisciplinary studies into folk medicine all over Africa. Particular attention is focused on laboratory studies of traditional herbal, animal and mineral treatments for diseases and on the psychosocial and anthropological aspects of healing rituals.

A leading Swazi herb doctor points out that while the training of doctors in Western universities is exceedingly expensive—and that most African doctors trained in the West tend to stay there to practice—there's no reason a competent tribal doctor couldn't be inexpensively educated in basic conventional health-care techniques: "One million dollars can educate 15 doctors. Or it can train 200 auxiliary health workers. Or it can buy vaccines for one million children. Which would you choose?"

Coup Topples "Schoolchildren's" Govt.

THE COMORO ISLANDS—A bloodless coup in the capital of this tiny four-island nation has put a halt, at least temporarily, to "a government run by schoolchildren." In the Comoros over half the 230,000 population is under 20, and before the conservative coup the youthful Maoist *Pouvoir Populaire*—"People's Party"—controlled the government at every level.

After taking power in 1970, President Ali Solih, himself 50, decreed that every regional affairs administrator, or *mudir*, must be younger than 30. He also reorganized the Comoran militia—the *Moissy*— so that to visitors the country actually appeared to be run by enthusiastic, highly motivated college students.

Progress was painfully slow, however. After President Solih unilaterally declared independence from France, the impoverished nation was compelled to rely on occasional grants from Kuwait and loans from the European Economic Community (EEC). Reluctant to grow indebted to the capitalist EEC, the young Pouvoir Populaire mobilized to construct roads connecting the food-producing interiors to the coasts, and to build 55 regional *mudirias*— complete service complexes housing government offices, pharmacies, deep freezes, groceries, etc.

But the primary shortcoming of the Pouvoir Populaire, according to observers, was its aggressive challenge to the traditional Muslim orthodoxy on the islands. Though the radicalized Moissy, like the Muslims, scorned alcohol and tobacco, they also vigorously enforced the banning of veils worn by women, interrupted overlong mosque services and broke up traditionally lavish Islamic weddings and funerals.

The new Comoran leader, 40-year-old Said Attomani, is a devout Muslim. Under his "political military directorate," he has pledged that technological progress will continue in the Comoros, but with untrammeled religious freedom.

Seeds and Mushrooms For Study and Research!

★ HAWAIIAN BABY WOOD ROSE SEEDS ★
(ARGYREIA NERVOSA) "THE PEYOTE OF ASIA"
20 for $3.00 1 OZ. (250+) $25.00
50 for $7.00 2 OZ. (500+) $40.00
100 for $13.00 ¼ lb. (1125+) $75.00

★★ PSYCHEDELIC MUSHROOM SPORES ★★
(INCLUDES SPORES, PETRI PLATE, AND DIRECTIONS. YOU CAN BUY ALL THE OTHER EQUIPMENT NEEDED AT YOUR LOCAL STORES)
PSILOCYBE CUBENSIS $6.50
PSILOCYBE CYANESCENS $7.00
PANAEOLUS SUBBALTEATUS $7.00

★★ RECOMMENDED STUDY BOOKS ★★
WHOLE DRUG MANUFACTURER'S CATALOG ... $10.00
LEGAL HIGHS BOOK $3.00
MAGICAL MUSHROOM HANDBOOK $3.00

QUALITY AND AUTHENTICITY GUARANTEED! FOR FREE INFO. SEND SELF-ADDRESSED STAMPED ENVELOPE. MONEY ORDERS SPEED DELIVERY. HEAD SHOPS AND DISTRIBUTORS WRITE FOR BULK PRICES.

Space Imports
P.O. BOX 254
LAWRENCE, KANSAS 66044
PHONE: 1-913-843-3115
10 A.M. to 5 P.M.
MONDAY THRU FRIDAY





Stash Pen / Clip

ALL IN ONE - THE GREAT IMPOSTOR
– DON'T GET "CAUGHT" WITHOUT IT –
THE PERFECT GIFT FOR THAT BOY IN THE MILITARY OR THE OFFICE EXECUTIVE WHO WANTS TO BE DISCRETE.

SAMPLE PEN $3.00
Black or Red BOTH $5.00

- Complete Illustrated Instructions
- Quantity Discount Prices Included
- Standard Size Pen 5½" Length
- Stash Chamber (3½" x ¼")

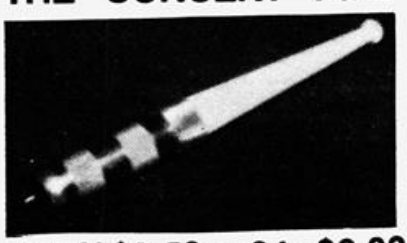
APPEARED IN MAR.77 HIGH STYLE SECTION

CONCEALS : Joints, Roachs, Pills, Hash, Emergency Match, Etc.
USES : Coke Tool, Cig. Holder, Etc.

CASH, M.O., IMMEDIATE
CHECKS 4 WKS. DELIVERY
NO C.O.D. - DEALER & DIST.
INQUIRIES WELCOME

Payable To:
RICHARD OWENS
297 GRAFFENBURG RD.
NEW HARTFORD, N.Y. 13413

Smoke
THE "CONCERT" PIPE



ONLY $3.50 or 3 for $9.00
Add 50¢ for postage for each pipe
N.Y. residents add 8% sales tax
B & J ENTERPRISES

NO CLEANING! NO ROLLING!
ABSOLUTELY NO WASTE
Simply fill the barrel, screw onto the mouthpiece, light, and enjoy. Carry it filled in your pocket conveniently concealed – without worry of spill or waste!
P.O. Box 1277, Selden, N.Y. 11784



FREE from THAI POWER...

FILTRATION KIT

worth $39.95

The makers of the amazing Iso-2 machine make this exciting offer: Order your Iso-2 now and receive the Iso-2 Filtration Kit absolutely FREE! The Filtration Kit costs $39.95.

While exotic name smokes continue to rise in price, smart American smokers everywhere are converting low grade stash and homegrown into super smoking experiences. Using a unique process called "isomerization", it's the amazing Iso-2 machine that lets you do this. You can concentrate one ounce into 2-3 grams of ISO-OIL.® Make the notorious ISO-HASH.® Make organic dyes, herbal teas, lettuce opium, aromas for incense, soap and candles.



Warning—Increasing the potency or changing the form of certain plant materials may be illegal in your state. Check your state and local laws. Thai Power advocates changing the law, not breaking it.

Dimensions: Wt. 15 lbs., Ht. 24", Dia. 12". Works off of standard 120v current.

NOTHING LIKE IT ON THE MARKET TODAY!!!

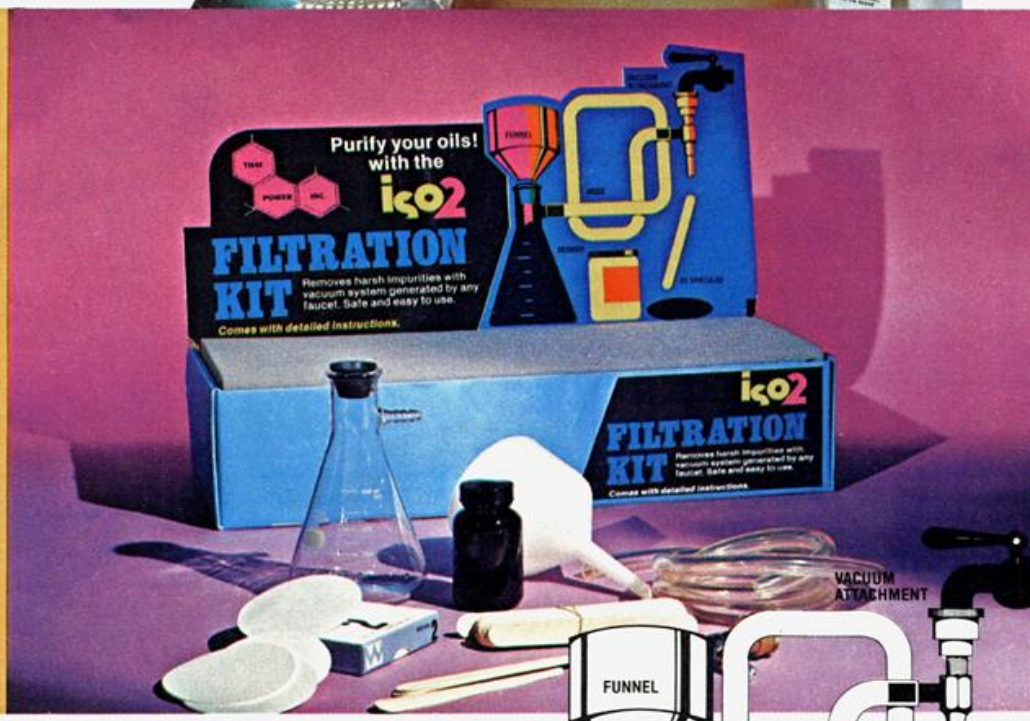
THE ISO-2

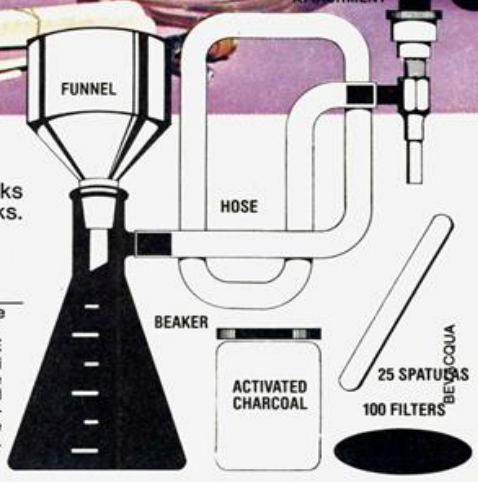
FILTRATION KIT

Here's a safe and easy way to purify your essential oils. Using a vacuum system generated by any water faucet and activated charcoal, a proven filtration medium, the Thai Power Iso-2 Filtration System is the ideal way to bring your oils up to the purest clarity and potency obtainable. There is nothing like it on the market today!

All parts are of the highest quality laboratory grade equipment. Comes complete with detailed instructions.

Comes with vacuum attachment, hose, beaker, funnel, activated charcoal, 25 spatulas and 100 filters.





THAI POWER, INC., Drawer "T", Manhattan Beach, CA 90266

☐ Send me____ ISO-2 @ $179.50 ea. with FREE Filtration Kit worth $39.95. (Cert. chk. or M.O., personal checks held 4 weeks.

☐ Send me____ISO-2 Filtration Kits *only* @ $39.95 ea. (+ $2.00 ship/hand).

☐ Enclosed is $10.00, balance $169.50 C.O.D. (+ $2.00 ship/hand).

Total Enclosed_____(Calif. residents add 6% tax).

Charge to my ☐ Master Charge ☐ BankAmericard ☐ VISA

Card Number Expires Signature

Name (You must be over 18) _____

Address (P.O. Boxes must have street address) _____

City_____ State_____ Zip_____

SPECIAL MONEY BACK GUARANTEE
If purchased by mail directly from **Thai Power** you can try the Iso-2 in your home for 10 full days. If not completely delighted and 100% satisfied, return in original condition for immediate refund—no nonsense—no excuses, complete refund immediately.

Culture Hero

Vincent Titus

He fucked Jean Harlow

by Ray Schultz



Industrialists, literati, revolutionaries and starlets, Vincent knew 'em all. Clockwise from left: John D. Rockefeller, Ernest Hemingway, Jean Harlow and Pancho Villa .

When meeting him for the first time, certain members of the human race get the mistaken impression that Vincent Titus is a shuffling wino. They avert their eyes and secretly wish that he would go away.

Wishing that Titus will go away is hardly enough to make him do so, though, for it is his trademark that when he wants to go, he goes. When he wants to stay, he stays. He is a 71-year-old poet and revolutionary who hangs out at various media offices in New York, drinking coffee and regaling his hosts with such enlightening revelations as "*I* fucked Jean Harlow" or "*I* fought with the Weathermen."

Because he is an authentic legend himself, he is quick to spot phoniness in others. Once, he approached the late poet Robert Vaughan and told him, "What annoys me most about you is your insufferable arrogance."

"I don't think you're qualified to speak," Vaughan replied.

"I think I am," Titus said, and shoved Vaughan into an elevator.

Titus is one of the most remarkable cultural figures of our time. He was born November 4, 1906, in Titusville, Pennsylvania, a small oil town named after his great grandfather, Job Lorimer Titus, who was George Washington's surveyor. From the start the family was filthy rich and rife with historical American ancestry. Titus's father was a successful stockbroker. His mother came from a line of wealthy WASPs who could trace their family tree back to Benjamin Franklin. His maternal grandfather was Coal-Oil Johnny Steele, on whose farm the first oil was discovered in 1859. At one point Steele was a partner of John D. Rockefeller's yet managed to avoid the financial screwing that Rockefeller so routinely dished out to other men. "Rockefeller gave my grandfather 25 million bucks, so he couldn't have screwed him *too* bad," Titus says. Another famous Titus relation was John Reed, who rode with Pancho Villa and was buried in Red Square next to Lenin.

When he was two Titus's family moved to Greenwich Village, where they owned a house. Vincent was educated in such exclusive academies as St. John's and St. Paul's, ultimately attending Harvard, where he associated with the likes of later Secretary of Defense James Forrestal and army majors George Fielding Elliot and Kendall Young en route to taking his Ph.D. in philosophy. (His doctoral thesis was on



Dutch Schultz, Abbott & Costello, F. Scott Fitzgerald: You can still shake the hand that mooched a quarter off these immortal culture heroes.

the relationship of William James to contemporary culture.) After a period of further study at St. Joseph's Seraphic Seminary, he was ordained as an Episcopal priest. "I was very religious as a child," he explains. "I was a goody-goody in a Lord Fauntleroy collar."

Like many others he eventually found Episcopalianism to be a milquetoast faith and converted to Catholicism. "I wanted some greater basis for my life," he says. "I wanted strength. The Episcopal church offered nothing." To facilitate this, he attended the Franciscan House of Studies in Washington, which did not exactly please his family. "They exerted various forms of family pressure, such as taking my driver's license away," he laughs. Ultimately, though, he realized that all the Catholic church had to offer that the Episcopal didn't was ritual. (He can still recite Mass in Latin.)

In due course he became a Marxist and enlisted with the Abraham Lincoln Brigade to fight in the Spanish Civil War. ("I knew Garcia-Lorca.") During his tour, he was captured by anarchists and sentenced to be shot as a Stalinist spy. He escaped, even though a fellow prisoner, Jim Lardner (son of the great sportswriter Ring Lardner), was shot. "Jim Lardner was a racist," Titus remembers.

During his years in Europe, Titus came into contact with several important authors. One was Henry Miller, who (Titus says) included a profile of him in *Tropic of Cancer*. (They met in cousin Edward Titus's famous bookstore Shakespeare & Co. in Paris.) Others were F. Scott Fitzgerald and Ernest Hemingway, whom Titus describes as a "truck driver."

Nonliterary celebrities of his acquaintance include saxophonist Charlie Parker and gangster Dutch Schultz. As Titus tells it, he ran into Parker in Carmel, California, in 1948, while both were recuperating in a hospital. ("A great man.") He met the Dutchman (aka Arthur Flegenheimer) while drinking at the latter's speakeasy in the 1930s. "We spent a lot of money," Titus recalls. "Schultz came over to our table and said, 'The house is yours.' "

Titus got around. In 1939, while working as a screenwriter for Republic Pictures, he claims he created the immortal "Who's on First" routine for Abbott and Costello. "Abbott and Costello were classic comics," he recalls. "They were schmoes, but they were alright schmoes."

(Continued on next page)

But his success didn't prevent Titus from desiring the death of all fascists. By the mid 1940s he was a member of the Central Committee of the Communist Party and a prime mover behind the Young Communist League of Brooklyn. Ultimately, his personal vision became so severe that he descended to the street level. "I remember Titus and Woody Guthrie having a fight in Washington Square one day," recalls Village publisher Jaakov Kohn. "There wasn't room in the park for both of them. Everybody was yelling 'C'mon, Woody' or 'C'mon, Vincent.' Titus also went around saying he was Vincent Van Gogh." As a result of such episodes, Titus was removed from the street and placed in the New York State Mental Hospital at Rockland in 1950.

He spent several years in this unhappy position, but it didn't calm him down. From the moment of his release in 1965 he was active in the antiwar movement,

Vincent Titus is our Dead Sea Scrolls, the missing link from the last generation to this.

running with the Motherfuckers ("I was an original motherfucker"), the Yippies and the Weathermen. Once when a car he was riding in en route to a demonstration in Washington broke down north of Baltimore, he is said to have gotten out and walked the rest of the way. He was then 65 years old.

Today, Titus is still extremely busy. He appears weekly on the "If I Can't Dance, Then You Can Keep Your Revolution" cable-TV show and also writes. In 1974 a book of his poems titled *Fables* was published to wide acclaim. Still bitter at his treatment in Rockland, he is a member and cofounder of the Mental Patients' Liberation Front. Politically, he describes himself as an anarchist. He has been arrested several times for ducking through subway turnstiles without paying. During one such episode he told the arresting officer, "Fuck you, you pig!"

Late last year he was married (his second) to Margaret McNorton, a talented painter at least 15 years his junior. Upward of 200 people showed up for their wedding at Washington Square Methodist Church. When I visited at their apartment not long ago, Vincent apologized for having become domesticated, but I got the impression he secretly enjoys his new life. As he sat on the sofa with his feet up (looking as weatherbeaten as he ever did on the street), he said, "Margaret, dear, would you please roll us a joint?"

His Life, His Times, His Work

Why do we still read Vincent Titus? America's flirtation with self-realization (or was it self-annihilation?) is over and dead, cut off as absolutely and brutally as the hose of an Exxon pump on Saturday night, and the Icarian generation of the '60s has plummeted back into the cozy, comforting amniotic muck of its middle-class origins, leaving only a psychedelic smear of gay feathers and sweetened wax to show of its pathetic attempt at flight. The student approaches the cultural residue of the '60s with gingerness and suspicion, like a gentlewoman turning over a cow flop: Hair, hard rock, happenings, be-ins, the underground press, black and women's and gay liberation, Timothy Leary, Allen Katzman, Mary Quant, communal living, Woodstock, Chicago and the Summer of Love—an excrement, a long blur of meaningless turmoil, blind violence and gross ripoff. Why then do we still read Vincent Titus of the East Village Other?

Because through his work we may grasp, if we try, an historical perspective through which to view these puzzling and depressing phenomena. Titus is our Dead Sea Scrolls, the key, the missing link: it is he who magically embodies, through his subtle koanlike epigrams, the living pulse of American literature in unbroken continuity from the last generation to this.

In Titus, we find the bold masculinity of Hemingway; and little wonder, for who do you think it was who tended Hemmingway's agonizing and embarrassing groin gore in that little corrida outside Alcegiras in 1936 and was kind enough to suppress the details for a generation? In him also we taste the despairing gaiety of F. Scott Fitzgerald; and appropriately so, for was it not with Titus that Zelda, in those awful days, was cheating behind Fitzgerald's back? Not only do we share with Titus our bitter, agonized, helpless, shameful witness of the Vietnam War, but he is also our avatar for the pride and horror of World War II, the Spanish Civil War, the First World War, the Boxer Rebellion and the conquest of Khartoum, in all of which Titus served with valor and distinction. And his impatient, majestic indifference to the quibbling anal niceties of punctuation, grammar and content hark us back to the Augustan Era, when Titus's mentors, Alexander Pope and Daniel Defoe, were writing in a language that was still young and pliable.

So if you, sir or madam, happen to encounter on the street a venerable little gentleman, wizened and weathered by the cark and care of his immeasurable existence but still possessed of an arresting glare—"I knew Coleridge," Titus will admit to trusted intimates: "Taught him how to allegory"—know then that you have been touched by something more immortal than mere genius. Titus, rumor has it, is God's big brother. Read him now.

—Dean Latimer

Once a lost bird flew to Algeria.
The crows received him with open arms
and wings extended in friendly solidarity.
Moral: Algeria's okay if you're a bird.

Once a vulture was indulging
in his usual diet when someone
offered him some people food.
I'll take a sample he said.
After he ate it, he turned blue
and fell down on the floor.
Boy, am I sick said the vulture. Do
people have to eat this all the time?
Moral: Foreign cuisine is not always
gourmet.

Once a dog had a bone
and he hoarded a lot of them
but he wouldn't give anyone else any
so the other dogs ganged up on him
and took all his bones
and stored them away for themselves.
Moral: Comes the revolution
everyone has bones.

Once a dog
ate some birdseed because
he wanted to sing sweetly. He
couldn't lay eggs either.
Moral: Stick to your own because
you'll be more appreciated.

Once a pig
was on his way
to the slaughterhouse
when he escaped. They
caught him and put him
through some changes until
he turned to pork.
Moral: don't be a pig.

Once a bird found a rock
and sat on it for twenty years.
He kept it warm and nice
but it didn't hatch.
Moral: Such perseverance for nothing.

—*Vincent Titus*

MUSHROOMKITS



Psilocybe cubensis remains the easiest and most popular mushroom for home cultivation. It is the largest of the *Psilocybe* mushrooms, some reaching weights of up to a pound apiece! It grows readily at warm temperatures common to its native Mexico. Homestead's new grain kit provides an excellent medium to produce a rewarding crop for the novice cultivator. The kit includes all the inoculating tools, alcohol lamp, malt-agar medium and petri dishes that come with our larger kits. The mycelium is transferred directly to the grain that is already contained in two bottles, and the mushrooms grow directly out of the bottles. Casing soil is included as well as our usual lifetime supply of proven-fertile spores. For larger crops, we have available a non-manure compost the *Psilocybe cubensis* thrives on. Simply transfer the already growing mycelium into this compost and your crop will be increased many times over. The spores are also available separately.

BEGINNER'S CUBENSIS KIT $25



Psilocybe cyanescens is a particularly favorite mushroom in the temperate climate of the Pacific Northwest where it thrives on wood mulch. The mycelium spreads rapidly at warm temperatures in the 70's and fruits at about 50 degrees Fahrenheit. When the climate is suitable, this mushroom is ideal for growing outdoors in your garden. Once established you can transfer this species without sterile culture. We include two pounds of a non-manure wood compost that is also available in larger amounts at a very reasonable price for more extensive cultivation. This is a beautiful little mushroom that will more than satisfy the most particular mushroom fancier with its prolific growth. With some ingenuity it can be grown indoors using a thermostatically controlled refrigeration system, as described in the instruction booklet which is enclosed in the kit. The spores are also available separately.

OLYMPIC MUSHROOMKIT $34



Panaeolus cyanescens grows in the tropical environs of Hawaii, where it is highly prized and loved. This small mushroom springs forth from compost in only ten days after the spawn is added to it. The kit includes two pounds of a specially-blended washed straw manure compost, which has been scientifically proven to be the most productive medium for dung-inhabiting mushrooms. The proper hot and humid climate can be reproduced in an indoor or outdoor setting in many parts of the country. A green house is ideal. As in all the kits, we include all the tools and supplies you need, grain for spawning, and the booklet illustrated from Bob Harris' **Growing Wild Mushrooms.** Compost for this mushroom is not available from us in extra quantities, but it can be easily produced in unlimited quantities using the Pasteurite Electric Compost Machine, invented by Bob Harris. The spores are also available separately for a limited time only.

HAWAIIAN MUSHROOMKIT $37

The Homestead Book Company introduced the first *Psilocybe* Mushroomkits a year ago, and now we are pleased to introduce the latest developments in mushroom cultivation. Our 3 new kits include all the tools and supplies needed, a generous amount of fertile spores, and a completely illustrated booklet excerpted from Bob Harris' **Growing Wild Mushrooms.** We recommend that you purchase the revised edition of the book, which includes information on all three species.

Send check or M.O. to Homestead Mushroomkit, 4009-K Stoneway N., Seattle, WA. 98103.

☐ Beginner's Cubensis Kit	$25	☐ Spores- *Psilocybe cubensis*	$ 7
☐ Olympic Mushroomkit	$34	☐ Spores-*Psilocybe cyanescens*	$ 8
☐ Hawaiian Mushroomkit	$37	☐ Spores-*Panaeolus cyanescens (Hawaiian)*	$10
☐ Pasteurite Electric Composting Machine	$60	☐ Compost-10 lbs. (not for Hawaiian)	$10

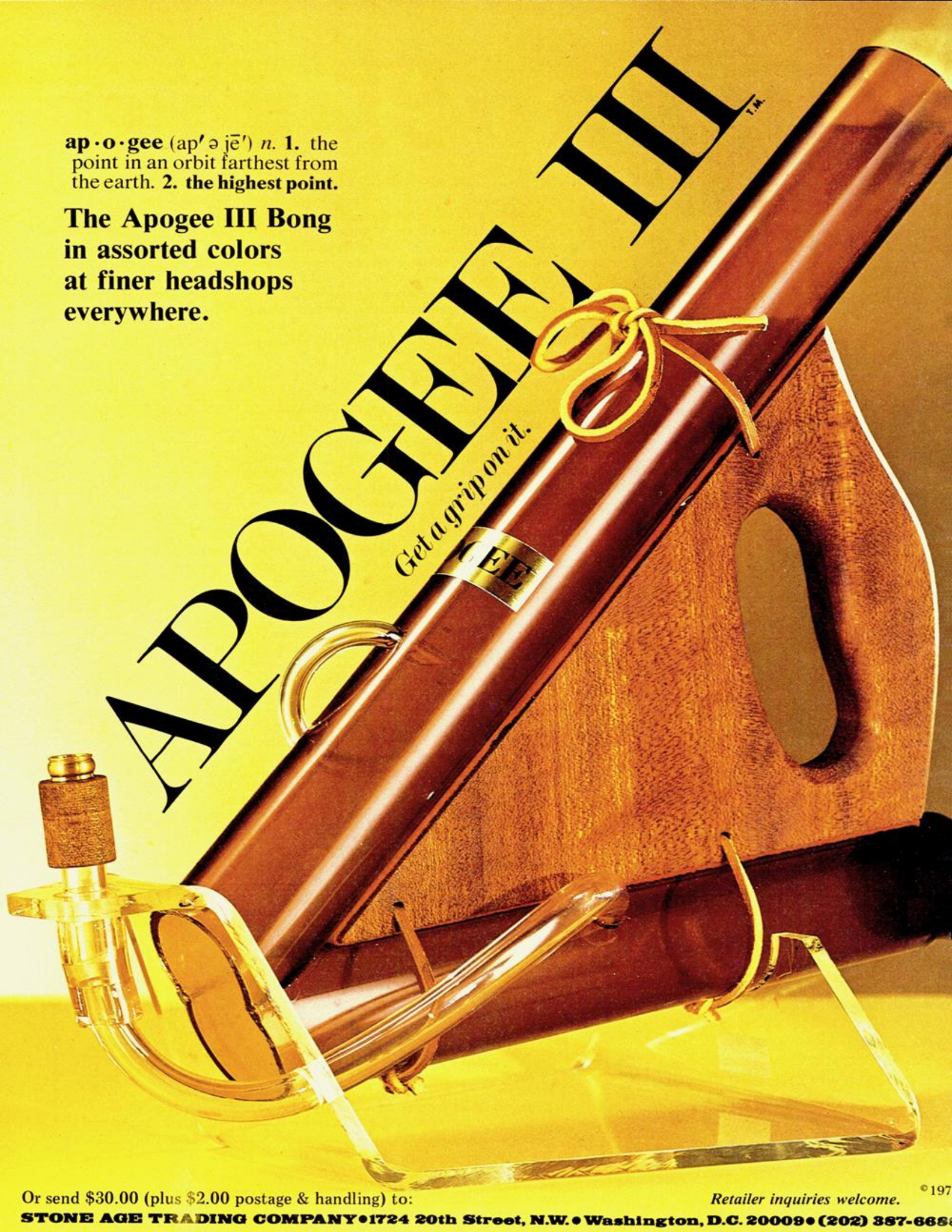
☐ **Growing Wild Mushrooms (revised edition)** **$4.50**
☐ **Magical Mushroom Handbook (field guide)** **$3.50**

Name: _____

Address: _____

City, State, Zip: _____

Prices include postage and handling. Washington residents add 5.4%. Canadian and European orders add 15% U.S. funds. Dealer and distributor inquiries welcome.



ap·o·gee (ap′ ə jē′) *n.* **1.** the point in an orbit farthest from the earth. **2. the highest point.**

The Apogee III Bong in assorted colors at finer headshops everywhere.

Or send $30.00 (plus $2.00 postage & handling) to:

Retailer inquiries welcome.

©197

STONE AGE TRADING COMPANY • 1724 20th Street, N.W. • Washington, D.C. 20009 • (202) 387-666

HOW TO MAKE A MILLION DOLLARS IN THE DOPE BUSINESS ...LEGALLY!!!



A new billion dollar industry is blooming right beneath your nose and between your lips. *HOW TO MAKE A MILLION... LEGALLY* gives you step by step instructions on how to join this fascinating high profit industry. *HOW TO MAKE A MILLION ...LEGALLY* will show you how to take your knowledge and ideas and transform them into BIG $$$. This 96 page book contains over 50 names and addresses of companies who are waiting to buy your ideas and products.

HOW TO MAKE A MILLION...LEGALLY represents your passport to an exciting profitable business and the glamorous lifestyle that goes with it.

You will learn:

- How to change your ideas into big money
- Where and who will buy your ideas and products
- How to raise any and all capital needed
- How to get paid *Cash Before Delivery*
- How to start in your own home
- Shortcuts to instant profits
- Why and where people are just waiting for your ideas and products
- How people have created financial independence in just months

If you have ever spent ten bucks for a lid of grass, you have to buy this book... you owe it to yourself. ACT NOW . . . RICHES, WEALTH, AND FAME AWAIT YOU.

HEAD PRESS, P.O. Box 39415, L.A. 90039

Rush me _____ books @ $6.95 ea.
Enclosed is cert. check or money order.

Name _____

Address _____

City_____ State_____ Zip_____

Solar Do-It-Yourself

(continued from page 64)

efficient greenhouses.

Heat losses are cut to a minimum. Infiltration losses must be cut to a minimum. As observed by grower A. W. Gerhart: "We simply do not introduce any fresh air into the greenhouse unless it is necessary to cool the crop." The attached greenhouse has an advantage here because during the winter beneficial air circulation occurs between the home and the greenhouse.

Convection and conduction losses are fought with multiple sheeting on the clear surfaces of glass. Recent research by Dave MacKinnon indicates that losses through thin materials, whether transparent or opaque, may be two to three times greater than previously indicated. Any greenhouse should certainly have a double layer of sheeting. I've found that an outer layer of fiberglass/acrylic and an inner layer of greenhouse polyethelene are both durable and inexpensive. Some older glass houses have even gone to double poly walls over the glass.

Radiation losses are particularly high in the Southwest. Rutgers University, now working on some solutions, has reported that additional heat savings can be achieved by using horizontal and vertical curtains inside the greenhouse to reduce convection and radiation losses. This report shows a savings of over 50 percent when a black plastic curtain system was used as a blanketing system. The mechanical problems involved in moving such a device are greater for the commercial unit than for the small home greenhouse. Moving insulation for a home greenhouse is more a matter of individual commitment to the system than a spatial or economic consideration.

Geometry of Greenhouses

The diffuse radiation that enters through the north wall in a conventional greenhouse must be improved by an insulated reflective barrier. This becomes more important in northern latitude.

Some consideration should be given to the amount of clear surface on the roof, in order to keep the greenhouse cooler in summer when the sun is at a high altitude and warmer in the winter. This can be solved with the use of insulation and opaque materials. A steeply tilted south face will transmit the maximum amount of light in winter and reflect a substantial amount of the direct radiation in the summer. These geometric and material differences lead to a higher initial cost in a free-standing solar-designed greenhouse, but their long-term heat savings justify that expense.

When a greenhouse is built on the southern side of a home it already has an opaque north wall. The challenge here is to balance light-transmitting and -reflect-

HYDROPONICS IN A POT (& vice-versa)



$8.50 ppd.
5" Model For Short Daylight Hours

$11.00 ppd.
7" Model For Long Daylight Hours (or Artificial Light)

A MINI-GROWING BED (¼ sq. ft.) IN TWO POPULAR SIZES

★Higher THC Potency
★Easy: Plant in one minute
★Seed starter & planter in one
★Self watering planter
★Grow in artificial or sunlight
★Higher ratio females
★Faster growth
★Transplanting not required
★Pumps not needed
★Ideal on patio, balcony window

Offer includes reusable Hydroponic planter & Hydroponic Rock-of-Ages, starter samples of two super juice nutrients, and complete instruction manual. Also ideal for houseplants.

★also **SUPER JUICE TWINS**

The Gourmet Food For Plants



★ Forces Luxurious Growth
★ Promotes higher female ratio!
★ Field tested & proven

Two 8 fl. oz. liquid concentrates - - enough nutrient to bring 200 plants to harvest!

PAIR **$8.50** ppd.

SELECT INDUSTRIES
1150 Civic Dr. Dept. 2
Walnut Creek, CA 94596

Plant Products & Hydroponics
- since 1968 -
Over 80 items in 9 major areas

Name _____

Address _____

City State Zip

Enclosed is my check/money order* for:

___ 5" GroWing SyStem $8.50 ppd. _____

___ 7" GroWing System 11.00 ppd. _____

___ SUPER JUICE TWINS 8.50 ppd. _____

Total $ _____

VISA ☐ MASTER CHARGE ☐ #

*Cal. Res. Tax 6½% _____

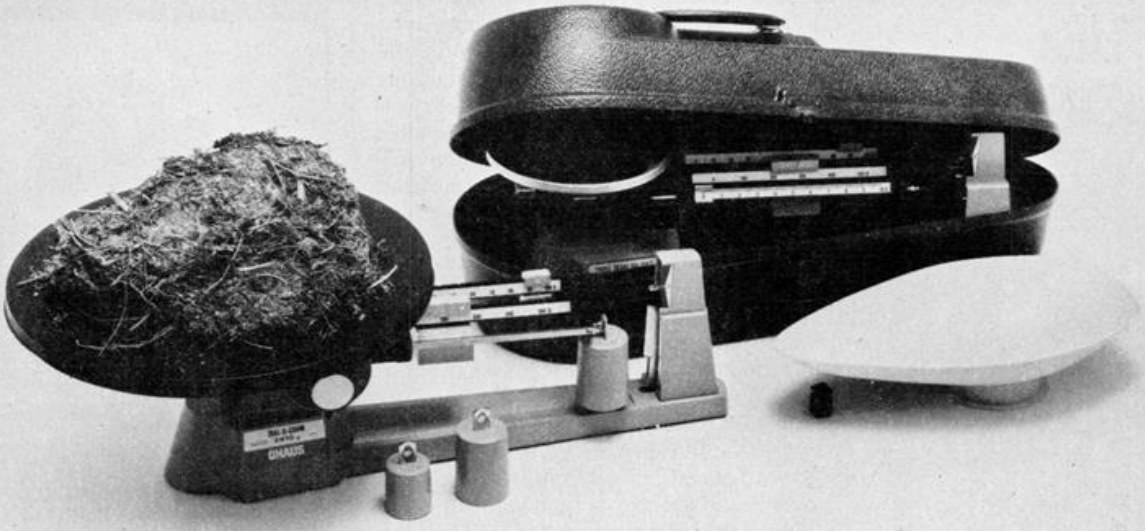
SIGNATURE

Amt. Encl. $ _____

EXPIRATION DATE

ALLOW 4 WEEKS FOR DELIVERY
Certified checks and money orders shipped immediately
SOLD AT BETTER HEAD SHOPS EVERYWHERE
Dealer inquiries invited 415/935-3186.

DON'T LET YOUR BEAM GO NAKED...



EASY BAGGER™

Our EASY BAGGER scoop now enables you to bag your ounces within seconds.
$7.95 w/counter weight

PORT-A-BEAM™ PATENT PENDING

Our Port-A-Beam case has a custom fitted cradle to prevent movement of scale. There are built-in provisions to store attachment weights. Accommodates both triple beam and dial-o-gram scales.
$19.95

5 POUNDER™ PATENTS PENDING

Our 12" round 5 POUNDER doubles the weighing surface, allowing you to weigh out five pounds easily.
$7.95 w/counter-weight

Ohaus 750S Triple Beam Scale - $69.95
Optional 707 Weights - $15.95

If not available at your local Head Shop, send check, money order, Master-Charge, BankAmericard (card # and expiration date) with your order or call us. We ship C.O.D. $1.00 extra.

Send $2.00 for complete scale catalog. Dealer & Distributor franchises available. New York Residents must add sales tax.

Correct Count Co.
607 State St., Santa Barbara,
CA. 93101

marygin

THE ONLY WAY TO CLEAN YOUR GRASS

When it comes to cleaning your favorite blend, Marygin will do it right. There's no mashing, shaking or grinding, just a gentle tumbling action that separates the stems and seeds from your grass.

Just follow the simple instructions and your stash will be cleaned in seconds.

There are over 300,000 gins now in use and it's time you found out what it's all about. Visit your local smoke shop and if you can't find one, write us. For quality rolling mixture Marygin makes the difference.

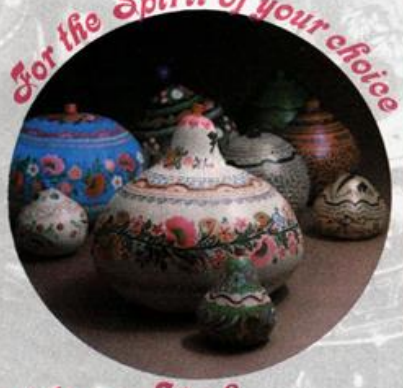
Marygin Inc.
P.O. Box 5827
Tucson, Ariz.85703
(602) 623-3732

$5.00



HORDES of GOURDS

For the Spirit of your choice



FROM INTERIOR Stash

GUERRERO

HANDPAINTED BY
GUERRERAN INDIANS
SINCE 500 YRS BEFORE Columbus

CHOICE OF
•PAINTED/ENGRAVED
3 SIZES
•SMALL MED. LARGE
CHOICE OF
•SEVEN COLORS
LAQUER COATED
•WATER RESISTANT

ONLY:
$20.00 each
& 2.50 postage & hand.
ALLOW 4 WEEKS FOR DELIVERY

ORDER FORM: CREDIT CARD #
CIRCLE YOUR CHOICE
SMALL - MED. - LARGE
PAINTED - ENGRAVED
RED-BLUE-GREEN-BLACK
YELLOW-WHITE-ORANGE
NAME
ADDRESS
CITY

MAIL TO: HORDES of GOURDS
2053 AUSTIN HWY.
SAN ANTONIO, TEXAS 78218

ing surfaces with dark, heat-absorbing and insulating materials.

Thermal Storage

Thermal storage is mandatory because it absorbs heat and returns it to the structure in a time lag. One easy and effective method is to put thermal mass into the structure in any way it fits. By using two gallons of water in drums per square foot of clear glazing in attached greenhouses, we have found that the unit will maintain winter interior temperatures at 25 to 30 degrees above outdoor lows. The same mass that heats the structure in winter helps cool it in summer.

There is no way for the greenhouse grower to lose by putting more mass into the structure. Other materials that can be put to work are soil, rocks and the building materials in the walls and floor. With proper orientation and insulation, there can be a tremendous effect in passive measures such as the use of mass. For example, the Tyson greenhouse, which has 220 gallons of water storage and 7,000 pounds of concrete in the walls, kept a 43-degree low temperature at -4 degrees outside. This was three days after completion, before the mass in the 1,800-square-foot greenhouse was charged.

When a greenhouse is attached to a building with some thermal mass like brick, concrete or adobe, it becomes a solar heater for the home. An attached greenhouse with high and low venting to a building will establish a free convective loop.

Water and Air Systems

The forced convection of heated air or water to thermal storage provides more control to the greenhouse operator and will be used increasingly in large-scale operations and extremely cold regions. In New Mexico, air systems tap the heat in the apex and blow it down through mesh rock-enclosed plenums that do double duty as planting beds. Dr. J. Douglas Balcomb of the Los Alamos Scientific Laboratories is using reversible fans and manual vent controls in his own home greenhouse. The New Mexico greenhouses are only using the greenhouses as the collecting system, without any additional solar devices.

A greenhouse designed and built by W. Douglas Davis and Western State College of Gunnison, Colorado, combines movable insulation and reflectors, an integrated north-wall collector and water storage in 1,800 beer cans beneath the floor. The north-wall collector is made from wire mesh that is painted with a flat black. Air is blown down the collector over the water storage. At night the unit is tightly sealed. It has maintained 50°F at -23°F outdoor temperatures. This greenhouse provides just another example of what can be done with low-cost materials and some ingenuity in design.

A solar greenhouse in Tucson is in a test



STOP: muggers, robbers
PROTECT: family, home

K-9 COMMAND DOGS ™



FINEST TRAINED DOGS FOR SALE
SHEPHERDS & DOBERMANS
Super Big A.K.C. Puppies
Shepherds & Dobermans
WE SHIP DOGS ANYWHERE

2606 Cypress St.
Oakland, Cal. 94607
(415) 835-5800

TURN YOUR OLD HIGH TIMES ISSUES INTO A MODERN DOPE ENCYCLOPEDIA WITH THE NEW High Times SUPER INDEX



Reference on dope culture and history at your fingertips. •All **High Times** articles, letters, HighWitness News and columns indexed for easy referral. •A connoisseur's digest of dope facts, information and trivia, completely cross-refer enced.

Super Index covering issues #1 to 22 available at $3.00 per copy from High Times, P.O. Box 386, Cooper Station, N.Y., N.Y. 10003. Updates will be announced.

Name
Address
City
State
Zip

The sound of your music system has grown on you. But if you didn't start with high fidelity components, you can't possibly realize how much of the music on records and tapes you're missing.

High fidelity means the finest quality in music reproduction. The vibrancy and life of the original performance. There are no half way measures. To achieve real high fidelity, quality and precision must be built into every component of the music system. Each member of the Institute of High Fidelity has pledged itself to these high standards.

So when you buy a music system, regardless of what you spend, make certain it's total high fidelity. In the final analysis, high fidelity may not be life or death to you. But it is to the music on your records and tapes.

To help you learn all about high fidelity music reproduction, we've published the easy-to-understand 176-page "Official Guide to High Fidelity." You can get your copy by sending $4.00 to cover cost, postage and handling to: Institute of High Fidelity, Inc., 489 Fifth Avenue, New York, N.Y. 10017 (212) 682-5131.

You spend good money for records and tapes. Why shouldn't you hear all the music that's on them?



IHF

INSTITUTE OF HIGH FIDELITY

program at the Environmental Research Laboratory (ERL) of the University of Arizona.

The ClearView solar collector, which forms the greenhouse south wall, consists of venetian blinds coated on one side with a dark absorptive paint and encased in the air space between the two double panes of glass. Sunlight heats the metal blinds, which then heat the air around them; some of the hot air is then ducted throughout the greenhouse and adjacent rooms. Excess heat is stored by blowing the hot air through an underground rock storage bin. At night, room air is ducted through the warm rocks and is warmed and circulated throughout the house. At night, the blinds in the collector can be closed for privacy and to reduce heat loss.

During the winter, the air-inflated, double polyethylene roof of the greenhouse is filled with liquid-based foam for nighttime insulation. During the day, the foam material is reconstituted into liquid form to facilitate storage and reuse.

The ERL garden is expected to yield 360 pounds of fruits, herbs and vegetables per year. Since March 1976, it has produced an average of over two pounds of vegetables per day, mainly tomatoes, cucumbers, eggplant, peppers and lettuce.

For more information write Merle Jensen, Environmental Research Laboratory, University of Arizona, Tucson International Airport, Tucson, Arizona 85706.

From Solar Engineering Magazine, 8435 N. Stemmons Freeway, Suite 880, Dallas, Texas 75247.

A Heat Pipe in Your Future

Line the inside of a metal tube with a wick from a kerosene lamp, saturate the wick with water, evacuate the tube, seal both ends, and you have a heat pipe. Dip one end in a pot of boiling water and within a few seconds the other end will be too hot to handle.

Basically, a heat pipe is a super thermal conductor that transmits heat by the evaporation and condensation of a working fluid. It can transfer about 1,000 times more heat energy than copper, one of the best-known conductors, and do it with a temperature drop of less than 3°F per foot. Heat pipes have no moving parts, require no external energy (other than the heat they transmit), are reversible in operation and are completely silent. And, like any piece of tubing or pipe, they are rugged and can stand lots of abuse.

Already in use in medicine, nuclear reactors, space flight and as heat sinks in electronic equipment, the energy crisis and the increasing demand for more efficient use of fuels is prompting renewed interest in heat pipes for waste-heat recovery and solar-energy collection. Since you'll soon be seeing and hearing more about heat pipes, we've selected a few articles that will introduce you to their theory and applications and listed manufacturers who supply them:

"Heat Pipes: Breakthrough in Thermal



Available at your local headshop or directly from ***Maritek Industries****, P.O. Box 98391, Atlanta, GA 30359. Size "D" batteries (2 req.) not included. Georgia residents add 4% sales tax. Please include $1.25 postage & handling for each sifter ordered.*

STOP READ THIS AD

BE NICE TO YOURSELF

We ship anywhere - numerous Smoking Accessory Items; Papers, Bongs, Clips, Incense, and Gift Accessories.

SPECIALS CLOSEOUTS

MUST-LITE CO.
239 W. Main St.
Morristown, TN 37814

Distributors Please Inquire

Outside Tennessee 800-251-0973 **Inside Tennessee 615-581-7530**
Send $2.00 for Catalog - Remitted with first order. Retail - Wholesale

AN UNUSUALLY SENSITIVE SCALE FOR PRECISION WEIGHING **$32.95**

WEIGHS FROM ⅛ GRAM TO 4 OZS.
REMOVABLE 4" WEIGHING PANS
COMPLETE WITH 6 BRASS WEIGHTS



Correct Count Co. Inc.
607 STATE STREET
SANTA BARBARA, CALIF. 93101
(805) 963-3830

DEALER & DISTRIBUTOR INQUIRIES INVITED

EXTRA SETS OF WEIGHTS GRADUATED IN GR. OR OZS. AVAILABLE AT $5.95. AVAILABLE AT YOUR LOCAL HEAD SHOP OR PLEASE SEND PERSONAL CHECK. HOWEVER FOR FAST SHIPMENT SEND MONEY ORDER.
C.O.D. $1.00 EXTRA.

"Penalties against possession of a drug should not be more damaging to an individual than the use of the drug itself.



. . . Nowhere is this more clear than in the laws against possession of marijuana in private for personal use. . . . The National Commission on Marijuana and Drug Abuse concluded 5 years ago that marijuana use should be decriminalized, and I believe it is time to implement those basic recommendations.

"Therefore, I support legislation amending Federal law to eliminate all Federal criminal penalties for the possession of up to 1 ounce of marijuana."

—President Jimmy Carter
Message to Congress, 8/2/77

Today repressive pot laws are still disrupting the lives and careers of responsible, productive people — and wasting millions of tax dollars on fruitless police and court action. NORML has helped win the fight for humane laws in ten states. We need your help to finish the job once and for all.

Give justice a hand...

☐ **YES.** Here's my $15 annual membership fee (students $10). Send me *THE LEAFLET,* Special Reports, Action Alerts, unique product offerings, a NORML button and...more!

☐ **RUSH ME** the following NORML items. Sales proceeds help, too.

NORML®
___ BUMPER STICKERS @ 2 for $1.00
___ MATCHES (50 books) @ $3.50
___ GOLD LEAF PINS @ $1.25
___ T-SHIRTS @ $5.00 S___ M___ L___ XL___

___ BUMPER STICKERS @ 2 for $1.00
___ LAPEL PINS @ $1.25
___ T-SHIRTS @ $5.00 S___ M___ L___ XL___

☐ I'm not a joiner, but here's a contribution $_____.
☐ Send along additional information.

NAME_____

ADDRESS_____

CITY_____

STATE_____ ZIP_____

Please print. Enclose 50¢ for postage.

NORML NATIONAL ORGANIZATION FOR THE REFORM OF MARIJUANA LAWS
2317 M STREET, NW, WASHINGTON, DC 20037

This ad has been prepared as a public service and the space was donated by the publication.



Dealer/Distributor Inquiries

High Style FASHION



Wooden Decorative Ball
Metal Roach Stash Can
Flips Out—Spring Action

Roach Clip Pulls Up
Key Ring That Pulls Out
For Easy Seperation

WAIST AWAY IN HIGH STYLE

High Style makes you an accessory to cinch . . . with genuine Royal Naugahyde. A superior quality leather in seven crafty colors. Show off your middle class in one of *three designer patterns* . . . circular, slant and plain. HS belts pull you together in a snap with chrome finished fasteners. Make your next connection with High Style. It's a snap!

HIGH STYLE'S 2 IN 1 TURN-ON

Turn on your car . . . turn on your mind with High Style's Toke 'n Key Chain. Where there's smoke, there's High Style's sure-fire roach clip/stash can combo. A deco-device that "springs" into action and disengages easily from the key ring. Take a double hit with High Style.

CHECK OFF BELT COLOR:

☐ Buckskin RU 84
☐ Rawhide GE 75
☐ Black RU 81
☐ Parchment RU 74 of White
☐ Brown RU 82
☐ Red RU 71
☐ Blue GE 62

*High Style Emblem Can be Printed on For Additional 50¢

Belts:

__ Plain -7.95
__ Plain & Logo - + Logo
__ *Full Style - 8.50
__ Full Style & Logo + Logo
__ Clip - 3.50

* Full Style includes either style of Belt A or B Style

Name _____
Address _____
City _____
State _____ Zip _____
Please send me
Enclosed is my check or money order for $ _____

Mail to:
HIGH STYLE FASHION
P.O. BOX 39299
REDFORD, MI 48234
CALL 313-533-6086
2 to 4 weeks delivery

All orders include
10% for Postage | Handling
Michigan Res. 4% Sales Tax
Specify Belt Size and Style
Telephone (313) 533-6086
P.O. Boc 39299
Redford, MI Zip 48239

Signature _____

Economy?" by Charles Behrens, in Appliance Manufacturer, Nov. 1973, pp. 72–75.

"How Heat Pipes Work," by Don Noren, in Chemical Engineering, August 19, 1975, pp. 89–91.

"The Heat Pipe," by G. Yale Eastman, in Scientific American, May 1968, pp. 39–46.

Noren Products, Inc.
3511 Haven Avenue
Menlo Park, Ca. 94025
415/365-0632

Isothermics, Inc.
Dept. PM, Box 86
Augusta, N.J. 07822
201/383-3500

E. B. Kaiser Co.
2114 Chestnut
Glenview, Ill.
312/724-4500

From *Rainbook*, Schocken Books, 200 Madison Avenue, New York, New York 10016.

Selected Bibliography

The Book of the New Alchemists, Nancy Todd, E.P. Dutton, Two Park Ave., New York, N.Y. 10016. $6.95. Practical report on self-sufficient living experiments.

The Coming Age of Solar Energy, D.S. Halacy, Avon, $1.95. One of the few books with an account of the pioneers of solar energy.

Direct Use of the Sun's Energy, Farrington Daniels, Ballantine, $1.95. Although published way back in 1964, this remains one of the best introductions to solar hardware of all types.

Energy & Power: An Index of Possibilities, by the staff of *The Catalogue*, originally published in England by Clanose Publishers, U.S. edition by Pantheon Books, Random House, 201 E. 50 St., New York, N.Y. 10022. $5.95. A *Whole Earth Catalog* of physical and metaphysical energies.

The Food and Heat Producing Greenhouse—Design, Construction and Operation, Bill Yanda and Rick Fisher. $5.50 postpaid from John Muir Publications, Box 613, Santa Fe, N.M. 87501.

Mother Earth News Handbook of Homemade Power, Bantam, $2.25. Do-it-yourself guides in wood, wind, water, solar and methane.

Other Homes and Garbage, Sierra Club Books, 530 Bush St., San Francisco, Ca. 94108. $9.95. Four Stanford engineers cover solar heat, home electric generators, architecture, water, waste systems and food production with all the detail needed to make it work.

The Practical Book of Solar Homes, Bantam, $6.95. Introduction to various houseplans and equipment needed for each.

Rainbook, editors of Rain, Schocken Books, 200 Madison Ave., New York, N.Y. 10016. $7.95. The *Whole Earth Catalog* of home energy.

Shelter, Shelter Publications, Mountain Books, P.O. Box 4811, Santa Barbara, Ca. 93103, $6.60. Well-illustrated survey of handmade houses throughout the world.

Solar Energy in Building Design, Bruce Anderson, 1,300 pp., unbound for $28 from Total Environmental Action, Church Hill, Harrisville, N.H. 03450. This experience-tested solar encyclopedia has also been condensed into the same author's *Solar Home Book*, $7.50 from Cheshire Books, Harrisville, N.H. 03450.

Synergy: A Directory of Energy Alternatives, Jeff Twine, Box 4790, Grand Central Station, New York, N.Y. 10017, $8/year. The most complete continually updated listing of books, periodicals and manufacturers in the solar, wood and wind fields.

Also don't forget to call the federal government's toll-free solar information number (800) 523-2929 or write National Solar Heating and Cooling Information Center, Box 1607, Rockville, Md. 20850.

RANDY'S™

Insta Roach™

Wired

Rolling Papers

PAT. NO. 4,033,358*



The Last Word in Rolling Papers!!!

Contains a Disposable Roach Holder

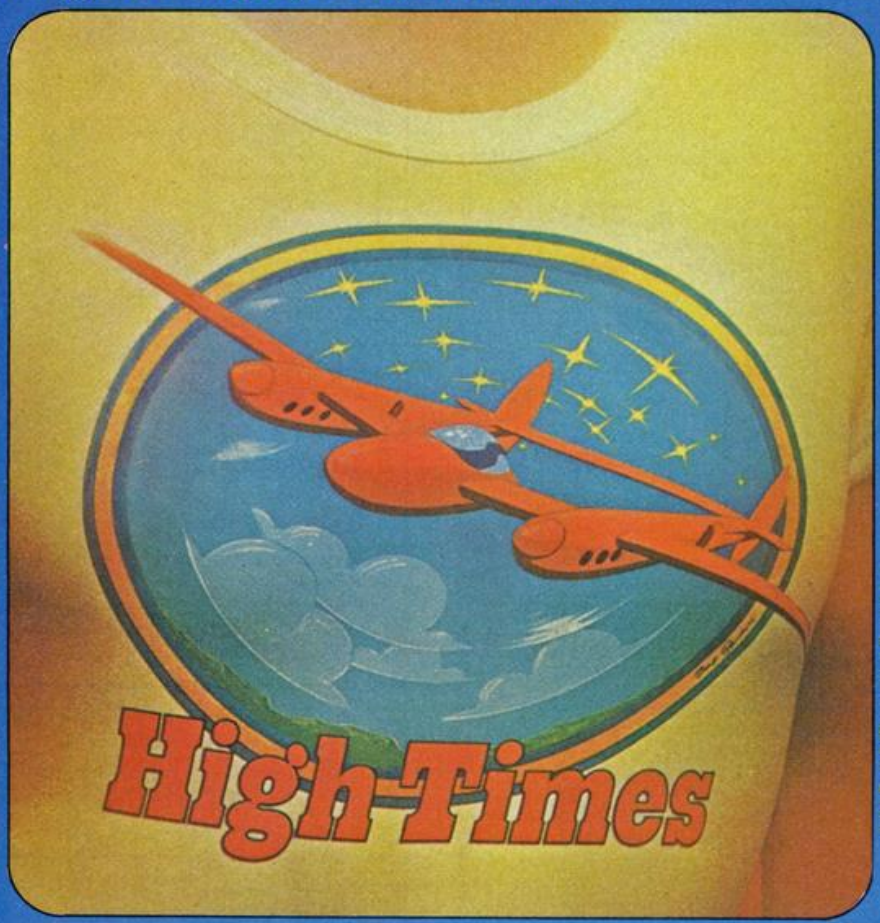
Easiest Rolling Paper Ever!!!

*NOTICE THE PATENT NO.! ONLY AUTHORIZED WIRED CIGARETTE PAPER PRODUCTS WILL BE MARKED PAT. NO. 4,033,358

Sample Order:
2 Packs——$1.00
Send With Your Name & Address to:
INSTAROACH INT'L
P.O. Box: 14323
San Francisco, CA 94114

MEET THE High Times T-SHIRT

It's bright and colorful, like a good conversationalist, and would just love to wrap itself around your body. Best of all, the **High Times** T-shirt refuses to discriminate—it comes in small, medium, large and extra large. Take the **High Times** T-shirt to your next High Society bash, and you'll never be wanting for good company. **Only $5 each.**



John Farrell-Progressive Designers

Enclosed find $_____ Please send me_____High Times T-shirts in sizes ☐ small ☐ medium ☐ large ☐ extra large

Name_____

Street_____

City_____State_____Zip_____

High Times Dept. 36, Box 386, Cooper Station, NY, NY 10003

Allow 6 weeks for delivery.

DEALER INQUIRIES INVITED

High Times BELT BUCKLE



The closest thing to your hip should be this exciting new *High Times* belt buckle. It's solid metal with a handsome pewter finish, and emblazoned with the famous *High Times* airplane. So tell the world what your favorite magazine is, as well as keep up your act in *High Times* style.

Send $6.00 each plus 50 cents each for postage and handling to:

HIGH TIMES
BELT BUCKLE
Dept. 36
P.O. Box 386, Cooper Station
New York, N.Y. 10003

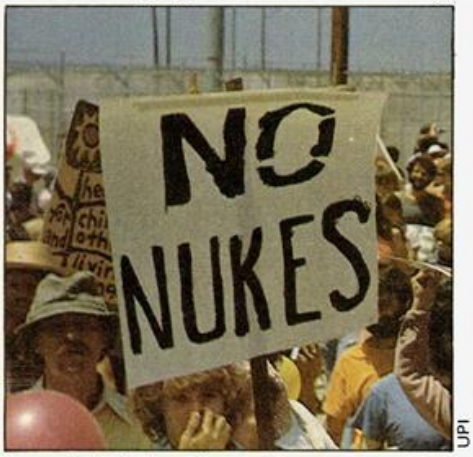
Allow four to six weeks for delivery.



Safety Law Stalls California Nukes

Controversy continues to rage over the constitutionality of the toughest nuclear safety law in the nation, which has virtually halted nuclear power development in California. The law forbids approval of new plants until the State Energy Commission agrees that safe methods exist for reprocessing or storing radioactive wastes. Such is not yet the case.

San Diego Gas and Electric, major investor in the proposed Sun Desert facility,



UPI

has asked the legislature for an exemption from the law. The senate voted to grant it just before the SEC recommended it be denied. At press time, the assembly is debating the loophole, while Governor Jerry Brown has indicated he may veto it if it passes.

Meanwhile, the assembly's legislative counsel called the safety law unconstitutional because it usurps control of radiation dangers that was granted solely to the federal government by the Atomic Energy Act of 1954. Ordered to provide an opinion, members of Attorney General Evelle Younger's staff said the safety law should stand, but Younger refused to accept the report. A prolonged court battle is expected no matter what happens in the legislature.

Alaskan Cocaine Out in the Cold

The Alaska Supreme Court recently refused to extend the right of privacy to protect home use of cocaine as it had in the case of marijuana in 1975. The court unanimously reversed the acquittal of seven defendants by the trial court. The judges leaned heavily on portions of expert testimony describing the dangers of the white powder and held that the potential harm to society outweighed the claims of privacy.

Although cocaine is obviously not a narcotic, the court upheld its legal classification with heroin by arguing that the legislature had used the word to mean any harmful drug. Crucial to the decision were the dangers of overdose, violence, paranoia and psychological habituation as portrayed in the National Institute on Drug Abuse monograph *Cocaine* and in Dr. Lester Grinspoon's book *Cocaine: A Drug and Its Social Evolution*. Nevertheless, the court agreed with witness Dr. Andrew Weil that cocaine presents "minor adverse problems, less than those resulting from the use of either alcohol or tobacco."

No Jurisdiction Outside U.S. Waters

U.S. courts cannot try crew members of marijuana ships seized outside U.S. territorial waters unless it can be shown they personally intended to break American laws, district court judge Joe Eaton ruled in Miami recently. Pending a possible government appeal, the decision would free nine Colombians arrested by the Coast Guard on the vessel *Caybur* 260 miles east of Miami.

Eaton emphasized that the ruling would not affect the Coast Guard's power to board, search and seize such boats under the Prohibition-era Hovering Vessels Act. Unless the case is reversed on appeal, the crew members will be turned over to the Immigration Service for return to Colombia.

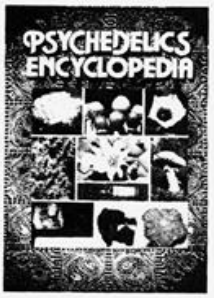
Search Does Not Include Phone Calls

When a resident gives police consent to search his or her premises, the search does not automatically include the right to intercept incoming phone calls, the California First District Court of Appeals recently ruled. The decision reversed Paul Harwood's conviction for sale of cocaine.

The case began with the arrest of Roger Brown for the same offense on the street near the apartment he shared with Judith Marshall. When Marshall happened by, she complied with the cops' request to search the flat, but no toot was found. However, Harwood picked this perfectly inauspicious time to call with the offer of a pound. The court suppressed the evidence, saying the police had no right to pick up the phone without Marshall's express consent or without prior reason to believe that calls would be related to illegal business.



PSYCHEDELICS ENCYCLOPEDIA



by Peter Stafford

$7.95
416 pages

Chronicles the drugs that revolutionized a generation and changed the world. A mind-expanding archive of a unique period of our lives.

Botany • Pharmacology • Effects • Cultivation • LSD • Cannabis • Peyote • Mushrooms & Cacti • Leary, Huxley & Alpert • Amazon Indians & Chinese Emperors • Pot Prohibition • Haight-Ashbury & Woodstock • And much more from our psychedelic roots.

To order: Send $7.95 plus 50¢ postage & handling to: And/Or Book Conspiracy, Box 2246, Berkeley, CA 94702. Expect 4-6 weeks for delivery. No cash or C.O.D. please.

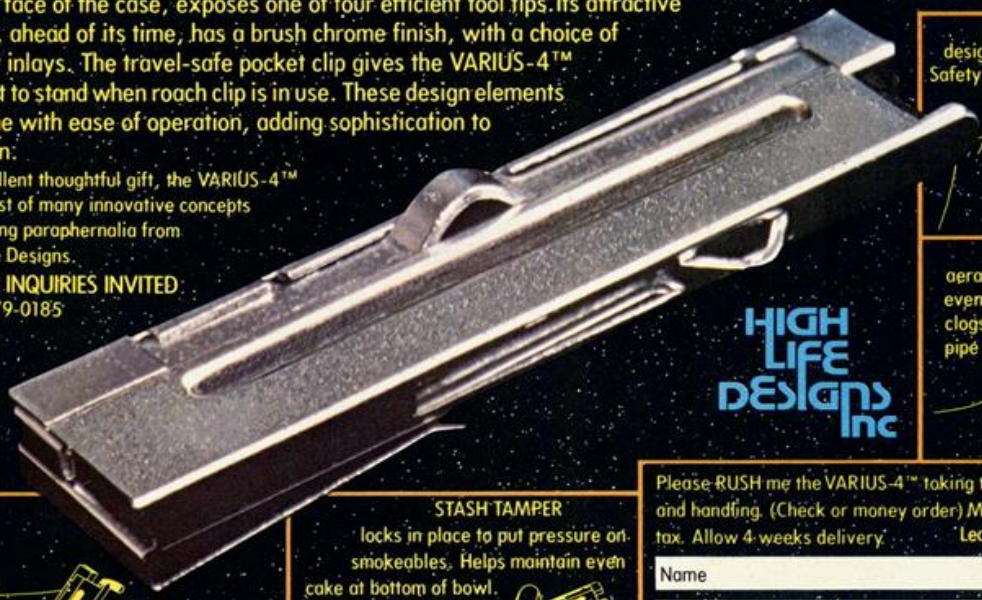
And/Or Press • Berkeley, California

VARIUS-4™ THE TOKING TOOL FOR THE 21st CENTURY

High Life Designs has the toking tool for the person who wants everything at their fingertips. You've had enough pockets full of toys. The VARIUS-4™ is the ultimate, integrated instrument, combining Hash Knife, Stash Tamper, Bowl Probe and Roach Clip into one unit. Weighing about one ounce, this durable steel tool is compact. Sliding one of the control tabs in either direction along the tracks on the side or face of the case, exposes one of four efficient tool tips. Its attractive design, ahead of its time, has a brush chrome finish, with a choice of leather inlays. The travel-safe pocket clip gives the VARIUS-4™ support to stand when roach clip is in use. These design elements combine with ease of operation, adding sophistication to function.

An excellent thoughtful gift, the VARIUS-4™ is the first of many innovative concepts in smoking paraphernalia from High Life Designs.

DEALER INQUIRIES INVITED
(612) 379-0185



HIGH LIFE DESIGNS Inc

HASH KNIFE
designed to cut evenly and smoothly. Safety Factor: locks in place when in use.



BOWL PROBE
aerates smoking mixture to promote even burning. Also great for clearing clogs from your favorite pipe or bong.

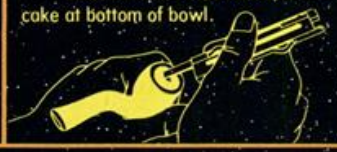


Patent Pending © High Life Designs 1978



ROACH CLIP
is easy to use and holds all size roaches.

STASH TAMPER
locks in place to put pressure on smokeables. Helps maintain even cake at bottom of bowl.



Please RUSH me the VARIUS-4™ toking tool at $8.95 plus $.50 for postage and handling. (Check or money order) Minn. residents add $.36 state sales tax. Allow 4 weeks delivery. Leather inlay BLACK ☐ TAN ☐

Name

Address

City State Zip

HIGH LIFE DESIGNS INC. P.O. Box 9659 Minneapolis, Minn. 55440

TOSS & TOKE!!™

©1978 PAT. PENDING

- IDEAL FOR OUTDOOR PARTYING!
- LOAD THE BEEHIVE BOWL!
- FLIES WITH AERODYNAMIC PRECISION!
- LOSES NONE OF YOUR GOLDEN BLOSSOMS!
- TOKE THROUGH HONEYCOMB SCREEN!
- HOW SWEET IT IZzz!



CATCH A BUZZ!

YES, I WANT TO TOSS, TOKE AND CATCH A BUZZBEE!®

NAME

ADDRESS

CITY

STATE ZIP

$6.97 N.Y. RESIDENTS ADD SALES TAX.

altered perception – 26 BAY ROAD, WEST GILGO BEACH, NEW YORK 11702 (516) 785-5886 (212) 684-0282



Dub Culture

by Glenn O'Brien


Kate Simon


Copyright © 1977 by Peter Simon

Joe Gibbs and King Tubby: two deans of psychedelic dub.


Chuck Pulin


Copyright © 1977 by Peter Simon

Dillinger and Bob Marley: bionic brain surgeon and dub dilettante.

American music lovers are just beginning to get what reggae is about. But reggae has a new wave, an ultra-modern music that combines the ancient rhythm sophistication of Africa, the great pop sound of Jamaica and the avant-garde musical technology of the modern recording studio.

I've been on the road lately. That means no stereo. Instead I have my cassette player and one single cassette. One side is *African Dub All-Mighty Chapter Three* by Joe Gibbs and the Professionals; the other is *Prophesy of Dub* by King Tubby's Prophets. Both LPs are Jamaican "dub," second-generation psychedelic reggae. This is real desert island stuff that reduces music to the bare essentials of survival, then builds it all up again in a complicated, unexpected, but accessible way. Every time you listen to dub you get something you expect—a great underlying beat that moves the body—and things you don't expect; strange layered arrangements are structured to surprise, so that the same record strikes you differently each time.

Dub's immediate musical roots are in the mobile discos of Jamaica. For years DJs have traveled the island with their sound systems and a collection of the latest reggae hits. But they don't just spin discs, they sing along while dubbing in the vocal track. Most Jamaican singles are made for this purpose—the B side is an instrumental version of the A side.

In recent years many of these DJs broke through to become recording stars themselves. And dub music began to develop its own musical direction. Since the dub sides of the singles were instrumentals, the musicians usually stretched out, jamming and working out subtle rhythmic variations. And producers began to let all their technical tricks hang out on the B sides, using echoes, software instrumentation and a collage approach to multitracks, thus psychedelicizing reggae.

Maybe the man who'll break dub in America is Dillinger, a dub chanter whose two LPs on Island Records (*CB 200, Bionic Dread*) feature great reggae music that you can dance to and are also very funny and hip in both Rastaman and urban American terms. Dillinger sings songs in the hippest tones and terms imaginable not only about dread and the fall of Babylon but also about motorcycles, kung-fu fighting and cocaine running round the brain. His song "Cokane in My Brain" could be a disco hit, if they had the brains to play it. And one listen to Dillinger's "Bionic Dread" explains everything you need to know about the conflict between natural living and technology.

Dillinger sings songs about dread and the fall of Babylon, and about motorcycles, Kung-fu fighting and cocaine.

In dub the rhythm never stops, but often the sound is reduced to *pure* rhythm. Sometimes just one drum or percussion instrument. Then it builds up layer by layer—at times reaching full band strength with horns and vocals level, but usually somewhere in between with the vocal, instrumental and special-effects tracks (like doorbells, telephones, engines, etc.) entering and exiting stereophonically, like characters on a stage. Even silence becomes a major force. These build-up layers create a sense of spatial dimension that makes most pop music seem positively flat, linear, one dimensional.

Around 1975 dub influence began to show heavily on the best of the breakthrough reggae artists. Bob Marley's *Rastaman Vibration* showed a lot of dub style, and Burning Spear's *Garvey's Ghost* is one of the greatest, spaciest dub albums ever made. At about the same time the great dub producers like King Tubby and Joe Gibbs began recording finished dub albums—radically more minimal and experimental than previous reggae recordings, but still sexy dance music. These records had enormous appeal among reggae fans from Jamaica to London. In London dub was adopted by punks. They danced to it like most folks did to disco—skanking to records between pogoing to bands in the clubs. Not only was it a great beat, but it was musically provocative, and lyrically it was rebel music.

Many of London's first top-rank punk rockers were true reggae fans and showed it. The first show of punk-reggae solidarity was made by the Clash, who recorded Junior Murvin's hit "Police and Thieves" on their first album. Unlike previous reggae covers by rockers (like Eric Clapton's number-one slavish remake of the Wailers' "I Shot the Sheriff"), the Clash played the song in their own style, coming up with something truly unique. Lee "Scratch" Perry, who produced the original "Police and Thieves" and who has produced the Wailers for many years, heard the record and as a gesture of

A Product To Sell?

these Headshops are buying

We have organized a select, up-to-date list of 1000 of our best national retail accounts. For the first time, this list is available to *you*. We fully guarantee the quality of our list by offering to replace or buy back any address that proves to be undeliverable.

We manufacture and distribute the original **Lettuce "Opium"** and **Black Gold,** and, with the help of these 1000 select retail stores, we have been able to sell well over ½ million units of our products.

Why not give your product(s) a chance with reliable nationwide exposure at a minimal cost to you?

Natural Enterprises Corp.
P.O. Box 2044
Gaithersburg, Md. 20760

Call our 24 hour Express Svc.
301 972-1130
or...

Save on additional C.O.D. and shipping costs by mailing cash, check, or money order directly to us today along with this coupon. Please print.

Name _____

Address _____

City, State, Zip _____

500 Guaranteed retail headshops $40.00 ☐

1000 Guaranteed retail headshops $55.00 ☐

500 Guaranteed retail headshops on ready-to-mail Avery labels $45.00 ☐

1000 Guaranteed retail headshops on ready-to-mail Avery labels $75.00 ☐

BONUS! Order the list of 1000 retail stores and receive, absolutely *free*, a list of 350 national distributors. You can't lose!

INFINITY'S END

*DISTRIBUTORS OF SMOKING ACCESSORIES, POSTERS, BLACK & PSYCHEDELIC LIGHTS, WATER BEDS

RETAILERS: TAKE NOTICE!

HEAD SHOP PARAPHERNALIA SERVICE
WE SHIP ALL OVER THE WORLD!

Merchandise shipped immediately from stock by experienced personnel. We serve established businesses, we expertly merchandise new ones and we help expand those with ideas. We are also truck-van jobbers thru-out N.C., S.C., Ga., Tenn., Va., Fla., Etc. Selection — 100% Guarantee — Generous Volume Discounts — Freight Allowances — Personal Contact — Plus phone and mail. We accommodate the Big and the Small.

IF YOU FEEL THAT WE CAN DO BUSINESS TOGETHER, SEND $2.00 FOR COMPLETE CATALOG. SERIOUS INQUIRIES ONLY. APPLICATIONS WITHOUT CASH, CHECK OR M.O. WILL BE C.O.D.

INFINITY'S END, INC.,

FRANK J. PIETRAS, PRESIDENT, DISTRIBUTOR DIVISION
3702 E. INDEPENDENCE BLVD., CHARLOTTE, N.C. 28205 IN N.C. PHONE (704) 536-7451—535-1710
ELSEWHERE IN U.S. CALL TOLL FREE 1-800-438-5160

Organize Your Head!

Are your rolling papers all over the house? Your stash in the refrigerator? Your roach clip under the bed? Smokers, your hassles are over! No more endless searching every time you want to light up! The Original Hooch Board organizes your head. Custom-made compartments hold everything you'll ever need... and, undercover. A sanded surface makes rolling and cleaning faster and easier. Made of highly polished acrylic, it's attractive anywhere. Don't stash this stash box. The Original Hooch Board keeps it where you want it, when you want it.

The Original **HOOCH™ BOARD**



Only $14.95 Each

Board Color
☐ Ebony ☐ Ivory
☐ Sable Brown

Leaf Color
☐ Green ☐ Gold
☐ Without Leaf

DEALER INQUIRIES WELCOME
Actual Size—9" x 12"

Send check or money order to:
Hooch, Co.
P.O. Box 821
Hicksville, N.Y. 11802

Name _____

Address _____ City, State Zip _____

Add $1.00 for postage and handling. Allow 2-3 weeks for delivery.

Help cure cancer write now.

Thanks to your help, the tide is beginning to turn. The past few years have brought new discoveries in chemotherapy.

And new diagnostic techniques that combine the "eyes" of X-ray machines with the "brains" of computers. And successful new programs of combination therapies.

And there are promising reports coming in from research laboratories all over the world.

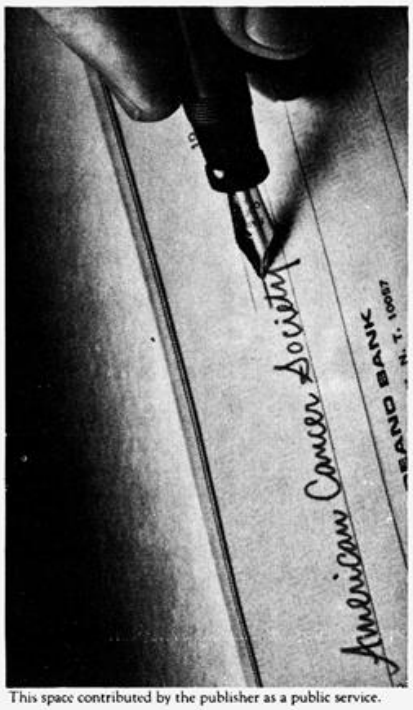
We now have everything we need to save about half the people who get cancer.

Please don't quit on us now.

We're halfway there.

American Cancer Society

We want to cure cancer in your lifetime.



This space contributed by the publisher as a public service.

appreciation recorded a single called "Punky Reggae Party," celebrating the unlikely but right-on cultural alliance of these black and white rebel cultures.

Right now the most famous punk in Jamaica is Johnny Rotten, for no other reason than Jamaicans know that he is the one who sang that song about the Queen. But it was also noticed that John Rotten knew his reggae, being heavily into dub and a big fan of many groups like the Congoes, the Gladiators, Culture and Trinity, all virtually unheard-of outside Jamaica. After Johnny left the Sex Pistols, he split for Jamaica and did a little reggae recording of his own, which could be available by the time you read this. But don't look for "Johnny Rotten Goes Reggae." He's changed his name to Johnny Cool.



Shahn Kermani

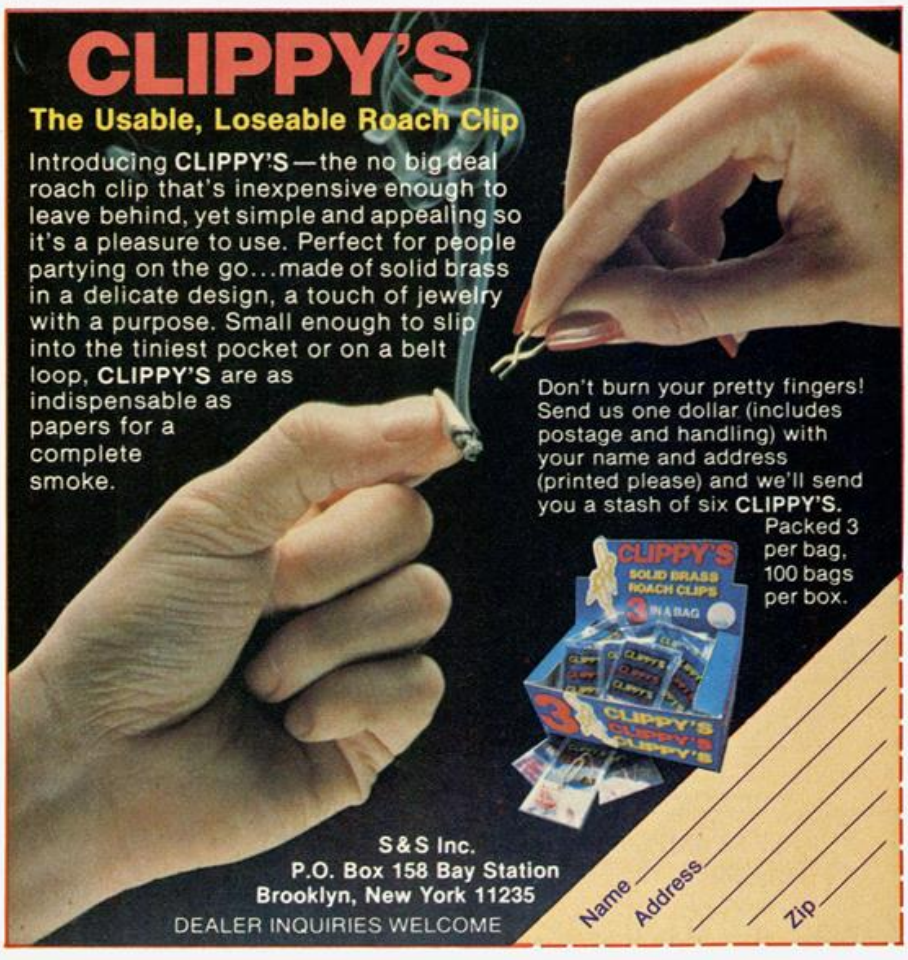
The Clash: "I wanna riot of my own."

Johnny ain't the only white boy doin' the reggae. Jonathan Richman, the elf of the new wave, had a big hit in England with his "Egyptian Reggae," which sounds just like Egyptian reggae. And Mark P., editor of London's most notorious fanzine Sniffin' Glue, put out one of the underground singles of the year in '77 with his band Alternative TV. "My Love Lies Limp" was a terrifically catchy reggae with comic lyrics about, uh, sexual apathy.

But the reggae influence isn't limited to imitation of the music. Rock bands are picking up on the technology and the philosophy of dub. So while the new Clash album will be rock 'n' roll, the message will be white Rasta—"White riot... I wanna riot of my own"—and the man behind the controls will be Lee Perry, bringing the science of dub to rock 'n' roll.

And now that acts like the Wailers have made the world more accessible to reggae, we'll probably get some dub and new-wave reggae released in the States. Ace dub producer Joe Gibbs just had a number-one hit in London with a record called "Uptown Top-Rank" by two cute little girls named Althea and Donna. This record not only has the dread depth of dub, but it's superdanceable, instantly catchy and has a female sound we haven't heard since the heyday of Phil Spector. It will be out here soon on Sire Records and could do a lot to "break" reggae on AM radio.







100% PURE WEED

Why Not Make This The Shirt On Your Back?

This full color silk-screened print is available on mellow yellow, hot red or sky blue shirts. The shirts are 100% cotton and machine washable. They come in small, medium, and large. Send $5.95 plus 75 cents postage and handling, to:
MANNED ENTERPRISES
P. O. Box 2562
Anderson, Indiana 46011
(Allow 2 - 6 weeks for delivery.)

Authentic Peasant HUARACHES



$15
Special-low mail order price

These sandals are the most durable in the world . . . hand made of thick leather with tire tread soles by the Sierra Madre Indians of old Mexico.

These are the authentic Huaraches, and we offer you hand selected pairs at a special-low mail order price.

We know you will be satisfied. If not, send them back within ten days, we will return your money. Order two pairs today—one for you and one for yours.

Please send me ____ pair(s) of Authentic Peasant Huaraches. I enclose a (check/money order) for $_____(add .95 per pair postage & handling. 6% tax in Louisiana).
My shoe size is: Ladies:_____ Mens:_____

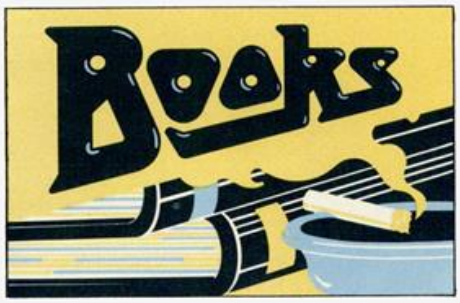
Name:_____

Address:_____

City/State:_____Zip:_____

MONEY BACK GUARANTEE
If not satisfied return within ten days—We will return your money.

PLETZ IMPORTS
5952 Magazine Street/P.O. Box 15240
New Orleans, Louisiana 70115



Agent of Chaos

by Rex Weiner

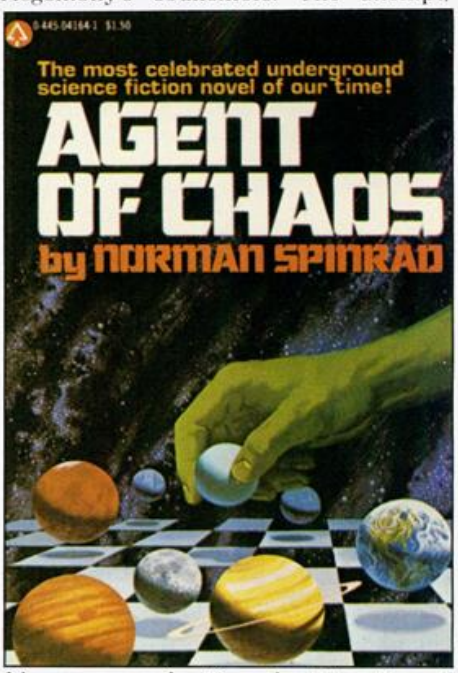
Until this brand-new edition (New York: Popular Library, $1.50) was released, Norman Spinrad's **Agent of Chaos** had always been a rare book. Although translations surfaced in England, France, Italy and Argentina after the book's initial publication in 1967, one's introduction to it was usually through a friend's tattered copy. Bookstores just didn't carry it.

Now that Popular Library has reissued this underground classic it will undoubtedly achieve wide circulation. Nevertheless, *Agent of Chaos* will remain a rare book in the sense that it is one of those literary fantasies so compelling as to move people to action, to make the fantasy real. One thinks of Jules Verne's *From the Earth to the Moon*, H.G. Wells's *War of the Worlds*, the works of Scientologist L. Ron Hubbard and B.F. Skinner's *Walden Two* as books that have inspired or frightened people into making fantasy a reality. So, too, has Norman Spinrad's slim volume provoked a reaction, which even to the author's surprise has developed into a true cult of chaos.

This cult following has emerged owing to the eerily prophetic nature of Spinrad's tale. Set in the twenty-fourth century, the story involves a tyrannical government that rules the entire solar system. This government is called the Hegemony and is composed of a ten-member council divided equally, and uneasily, between representatives of Earth's Western and Eastern hemispheres. It is, in fact, the logical projection of what today's détente could eventually become.

"Total order" is the primary goal of the Hegemony. This means peace and prosperity for every citizen at the expense of individual freedom. War, hunger and disease have been eradicated through the careful supervision of every "ward" (citizen) from birth to death. Thus, with absolute authority, the Hegemonic Council rules over the nine populations of the nine planets.

Fighting against the Hegemony is a small band of malcontents calling themselves Demokratists. Their headquarters are the maze of long-abandoned subway tunnels on Earth, one of the few places in the solar system free of surveillance. They number only a few hundred, and their philosophy consists of a vague desire for freedom. But none of them, not even their leader, can define what "democracy" means: the word has been long out of use. Nonetheless, they fight against the Hegemony, and the book opens with a scene of attempted assassination against one of the Hegemony's councillors. The attempt,



like so many other Demokratist actions, is a failure, but for an unusual reason.

The councillor is saved by the Brotherhood of Assassins, a mysterious group that sometimes acts against the Demokratists, sometimes against the Hegemony.

Spinrad's Brotherhood of Assassins is a mysterious group whose actions are completely random. They act with the force of chaos.

They are as capable of blowing up an entire city as they are of saving a councillor. The Brotherhood's actions are completely random. They are feared by everyone, precisely because they are unpredictable. They act, godlike, with the force of chaos.

That is the philosophical setup that has made this book popular among convicts, political groups and just plain zanies. One recognizes that the function of governments everywhere is to reduce the incidence of random events: these include crime, madness, natural disasters, fires, revolution and of course creativity in human endeavor. Governments function best when life is predictable. To this end, schools, laws, courts, hospitals and corporations are all working constantly, and thus we are reduced, often enough, to numbers, mere faceless statistics in an inhuman efficiency chart. This is not

always a consciously evil design, no more than the rigidly efficient structure of ant colonies is evil: it is simply that the shortest distance between two points is a straight line.

But the soul of humanity doesn't run in a straight line, and while many millions on this planet would be perfectly happy if a Hegemony put their lives in order, there are others for whom spontaneity, complexity and a certain amount of perverse chaos are the stuff of life. How to fight against repression of these things has forever been the question.

Agent of Chaos introduces the fascinating idea that one must fight totalitarian authority with its worst enemy: the element of chaos. To take an example from real life:

In 1972, an organization of cultural revolutionary zanies called the Zippies adopted *Agent of Chaos* as their tactical manual. They modeled themselves on the Brotherhood of Assassins. Their actions were outrageous and unpredictable. They threw pies at city council members, demonstrated outside the luxurious hotels where Movement leaders were staying, held a Wheelchairs-for-Wallace parade, passed out thousands of joints and dispensed LSD. They attacked Democrats, Republicans and Movement alike. No one knew where or when the Zippies would strike next, and at meetings between Movement leaders and the Miami police, each side accused the other of running the outlaw band. In the end, the only effective demonstrations held that summer were those staged by the Zippies. They created total chaos and destroyed the neat Hegemony-Demokratist impasse. They created heavy paranoia, and paranoia created Watergate and destroyed Nixonstein. They were random and chaotic and it shook things up and it worked.

This writer created Agents of Pie-Kill Unlimited, the original pie-in-the-face-for-hire organization. I was inspired by *Agent of Chaos*, and the rest is pie history. Pieing has become a major industry. People across the nation fell in love with the idea of hiring someone to throw a pie at their bosses, spouses, coworkers and stuffy politicians. The pie in the face has the perfect cosmic element of surprise and chaos.

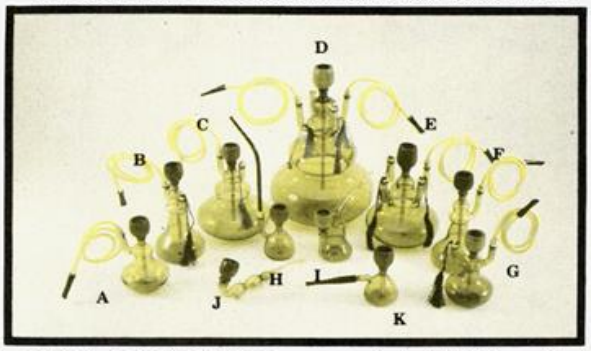
Agent of Chaos, besides being a great sci-fi adventure novel, also carries this element of spirituality. In particular, there are the sayings of Gregor Markowitz, who serves as the Brotherhood's theoretician and guiding light. Every time I throw a pie, I think of his words:

"If a man asks you, where can this Chaos of which you speak be detected by the human senses, take him outside at night and point to the stars—for in the limitless heavens themselves shines the countenance of Chaos."

And if you hit him hard enough, he'll see those stars.

New from the L.A. HOT SHOT

"Where New Products are Introduced First"



For the longest period of time waterpipes have been hard to find. We've unearthed masterpieces of design with durable smooth smoking teakwood bowls. They're not new but definitely collector's items. Check out the four hose takes and botan. Order now while we have stock.

CLIP OUT COUPON

A___ "A1" 1 hose	$10.00				
B___ Datsu	$13.00	H___ Hiroko	$10.00		
C___ Dan	$20.00	I___ Hana	$10.00		
D___ Botan	$50.00	J___ Sweet	$ 7.00		
E___ Takeo	$26.00	K___ Tama	$ 8.50		
F___ Yasu	$11.00				
G___ "A1" 2 hose	$12.00				

Include $1.00 handling charge

☐ Check Enclosed ☐ Money Order Enclosed

☐ Master Charge ☐ VISA

All numbers on your card Expiration date

Send To:: The L.A. Hot Shot
10836 Washington Blvd.
Culver City, Calif. 92030

Name _____

Address _____

City _____ State _____ Zip _____

Dealer & Distributors Inquiries Invited

It's a rolling paper, It's a note paper, It's two papers in one!

Cradled in their classic black vinyl writing tray are 100 sheets of the highest quality, extra thin, double-wide cigarette rolling papers; or are they note paper?

SMOKE A' NOTE is ideal for Love Notes, Spy Communications, White House Memos, Phone Messages; and best of all, as a high quality double-wide cigarette rolling paper!

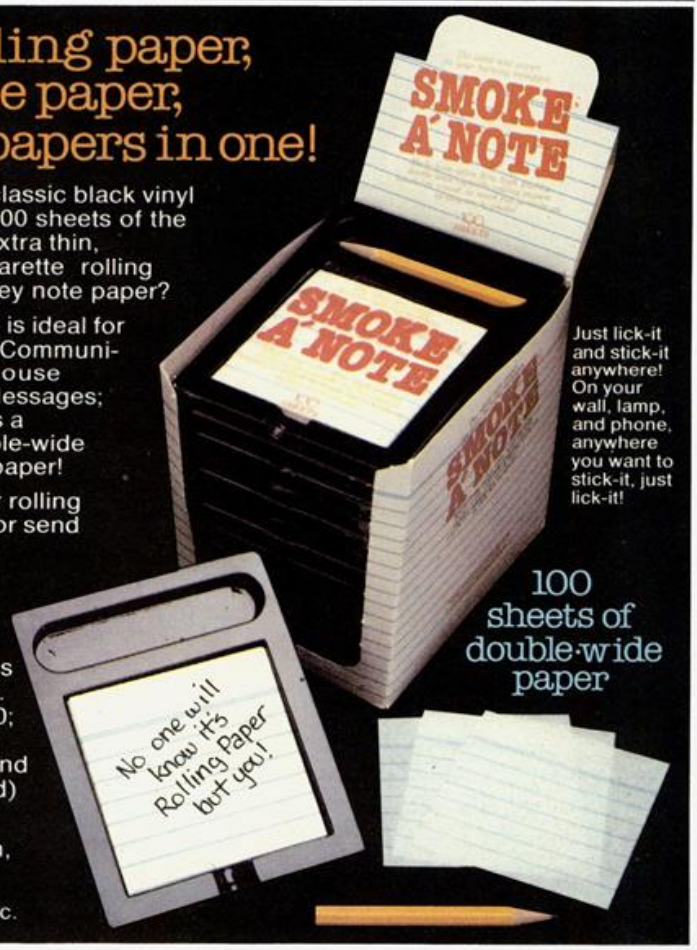
On sale wherever rolling papers are sold, or send

$2.00

in check or money order with your name and address to: RubyRose Inc. HT, P.O. Box 3720; Beverly Hills, CA. 90212 (postage and handling included)

Dist. by: Wenmar Int. Corp., Carson, CA 90746

©1978 RubyRose Inc.



Just lick-it and stick-it anywhere! On your wall, lamp, and phone, anywhere you want to stick-it, just lick-it!

100 sheets of double-wide paper

WHY SHOULD THE MAN IN THE STREET READ PUNK MAGAZINE?



"THE **BEST NEW** MAGAZINE IN THE **COUNTRY**"
- SCREW

"ALSO ONE OF THE **FUNNIEST** MAGAZINES IN THE **WORLD!**
- INTERVIEW

"**BRASH**, BRUTAL, + TRENDSETTING"
- BOMP

"THE FRESHEST BLEND OF CYNICISM AND **HUMOR** TO COME ALONG IN YEARS."
- ART DIRECTION

"THE **RETARDED** CHILD OF THE UNDERGROUND PRESS."
- PUNCH

SEND $13.00 FOR 12 ISSUES OR
SEND **$1.50** FOR A **SAMPLE COPY**
TO: **PUNK** MAGAZINE
SUBSCRIPTION DEPT.
P.O. BOX 675
NEW YORK, N.Y. 10009

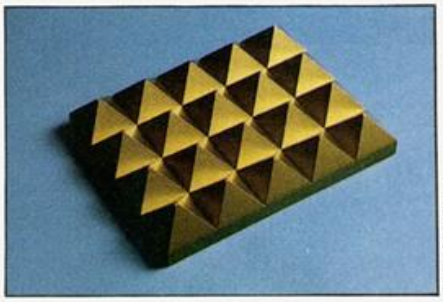
NAME _____

ADRRESS _____

SITY _____

STATTE _____ ZIP _____

Flash



Jack Abraham

All-Purpose Pyramid

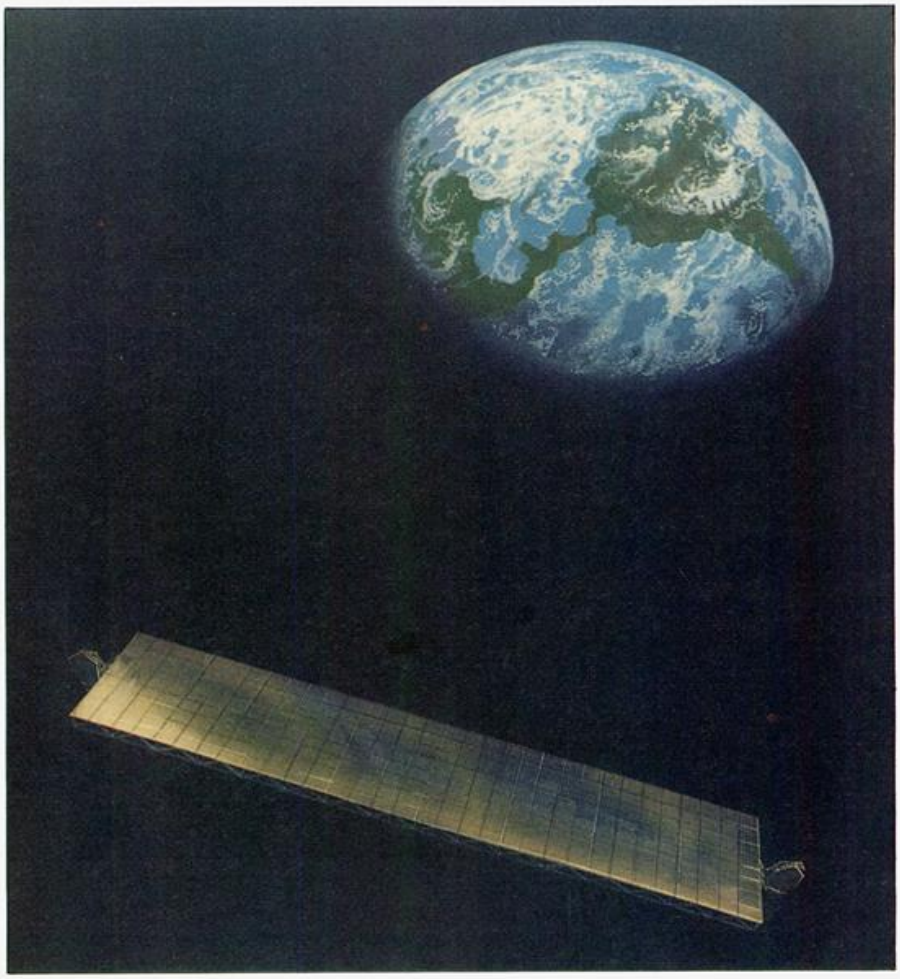
The Pyramid Energy Generator works in mysterious ways... lay a steak on it, place a bitter cup of coffee on it, lay your shlong across it—the pyramid makes everything taste so good you'll lick your Cheops. The gold-tone aluminum generator will also energize and revitalize your plants, sharpen razors and purify water, all for $7.95, a lot less than your electric bill. Write Pyramid Products, 701 West Ivy, Glendale, California 91204.



Jack Abraham

Classy Glassies

Solar energy is great, but you don't need it knocking on your naked eyeballs. Protect those dilated, glassy orbs (and be stylish to boot!) with Sparkle Shades. These custom-made, impact-resistant sunglasses are hand decorated with Austrian rhinestones, including any message you want in up to ten rhinestone letters or numbers. Available in blue, brown, yellow, green or gray (what, no rose?) for $25 from Sparkle Shades, P.O. Box 274, Lawai, Kauai, Hawaii 96765.



Solar Sell

You can guarantee having all the energy you'll ever need and impress your friends at the same time with your own solar-cell satellite from the Boeing Aerospace Company. Measuring 15.4 by 3.2 miles, you'd have to park this baby about 22,000 miles above the equator to get the full benefit of its 14 billion solar cells converting the sun's rays into microwaves that would feed into your own generating antenna. At $3 billion it's strictly a connoisseur item, but when you consider golden brown julienne potatoes cooked in ten seconds, you might want to discuss payment terms with Boeing, P.O. Box 3999, Seattle, Washington 98124.



Jack Abraham

Glass Heats Best

Ever since Lincoln and Douglas, the debate has raged over wood versus metal pipes. Now you can emancipate yourself from the entire argument with malice toward narcs by smoking an Ultimate Glass Pipe. Made from borosilicate glass (like Pyrex), the Ultimate stays lit longer, draws easy and doesn't need a screen. It changes colors as the resins build up and comes in sizes small ($18.95), medium ($22.95) and large ($26.95). Order from Norman Horton, 368-B Holly Avenue, Carpinteria, California 93013.

"Flash" spotlights the latest accouterments of the high life, including playthings, paraphernalia, instruments of pleasure, gadgets for your work and for your home—anything that adds zest and style to your day. If you know of an item that should be reviewed in this department, send it to the Flash editor.

Sideshow



Kathy Karwat

Pointy-Headed Intellectual

Gary Stimeling almost overloaded on pyramid energy after exhaustively researching his article in addition to editorially overseeing this issue's energy theme. Before joining *High Times* as science editor in 1976, Stimeling worked in typesetting shops and was an editor for the short-lived Better Healthkeeping magazine. A man of varied interests, Stimeling now departs *High Times* to study classical sax and flute and complete a forthcoming book on aphrodisiacs.



Peter Simon

Whole Earth Catalyst

For Harvey Wasserman, the threat of nuclear disaster hit home, literally, when a local utility tried to build a plant near his organic communal farm in Montague, Massachusetts. Plans for the plant have been stymied thanks to the vigorous opposition of concerned neighbors, but that was just the beginning of the fight for Wasserman. He has since traveled throughout Europe and Asia researching nuclear power and predicts that "the antinuke movement will grow bigger than the anti-Vietnam War movement."

A contributor to the Progressive, the Nation, New Age and the New York Times, Wasserman also wrote *Harvey Wasserman's History of the United States* for Harper and Row (1972). His goal is no less than "to stop nuclear power construction and dismantle all the nuclear plants that now exist."



Peter C. Brown

Sunny Boy

In the face of energy disaster a few courageous bellwethers are now trying to refocus our attention on the alternatives. Tom Kay, aka The Solar Kid, took the cause to new heights recently when he mounted a 40-foot tower atop a loft building in New York's SoHo and set up a pyramid tent to inhabit for three weeks. He had hoped to draw attention to the dangers of nuclear power and the necessity for both developing solar energy projects and legalizing marijuana.

Kay, 23, a former consultant to Exxon, was pulled down 20½ days short of his goal and roughed up by New York's "finest." Says Kay of the incident: "I didn't feel a thing. I was in a yoga trance." Undaunted, Kay vows to fight on through the aegis of his group, the Youth United Now Organization (P.O. Box 708, Woodside, New York 11377).

Windman of Alcatraz

An anti-Vietnam War militant serving a record sentence for his efforts is still putting radical energy to work—on radical energy designs. Karl Armstrong is doing 23 years at Waupun State Prison for the 1970 bombing of the University of Wisconsin's Army Mathematics Research Center in an attempt to halt its development of weapons for Vietnam.

Armstrong is planning a redesigned wind vortex machine, which runs on the pressure created by the tornadolike action of spinning wind. It can run on solar power on windless days. But inventions alone are not enough, according to Armstrong. "While science has the technical potential to solve the material problems of the world," he observed, "a new social and political order has to replace the present one for science to fulfill its promise."



Debbie Hawkins

Solar Scholar

Currently teaching journalism at Boston College, Dick Bell has been writing about solar energy and environmental issues for ten years, including a mid-'70s stint as managing editor for the Real Paper during which he helped publicize the development of the antinuke Clamshell Alliance. Says Bell, "I see the debate over energy as a way of opening the more important political discussion about what kind of world we really want and who we want making the decisions about our future."

THE HEAT IS ON

PURE RESEARCH is pioneering the development and distribution of professional testing equipment previously unobtainable to you, the general public.

Our innovative portable electric melt point tester will accurately determine the content and purity of crystalline substances. The HONEST HEAT™ melt point tester comes discreetly packaged in a fully padded protective wood box. Also included are glass slides for 50 tests, a note pad for recording results, and an authoritatively researched instruction pamphlet showing melt points of over a dozen different crystalline drugs and almost 20 adulterants. Test takes 20 minutes.

Don't get burned with HONEST HEAT™



HONEST·HEAT©

if you want the real thing

ELECTRIC MELT POINT TESTER

- **ONE YEAR LIMITED WARRANTY**
- Fully portable. Machine dimensions, 12"L x 2"W x 3½"H.
- Test takes 20 minutes. Product easy to view between glass slides.
- Thermometer fully protected with metal eye lid cover.

Send certified check or money order for $225 + $2 handling. California residents add 6% sales tax. For further information, send $1. Dealer inquiries on letterhead please. Patent pending.

Please send _____ HONEST HEAT™ Melt Point Tester(s).
I have enclosed certified check ☐ M.O. ☐ for $ _____
Please send additional information. $1.00 enclosed ☐

Name _____
Address _____
City _____ State _____ Zip _____

PURE RESEARCH • P.O. BOX 536 • FAIRFAX, CA 94930

SOMETHING REALLY NEW:

Kangaroo Brand Introduces...

The no-spill cigarette paper with a built-in pouch!™

ROLLING pouch

Look For These Displays In Your Favorite Stores



24 Count Box



100 Count Box



Unique Dual Display
50 Count Box

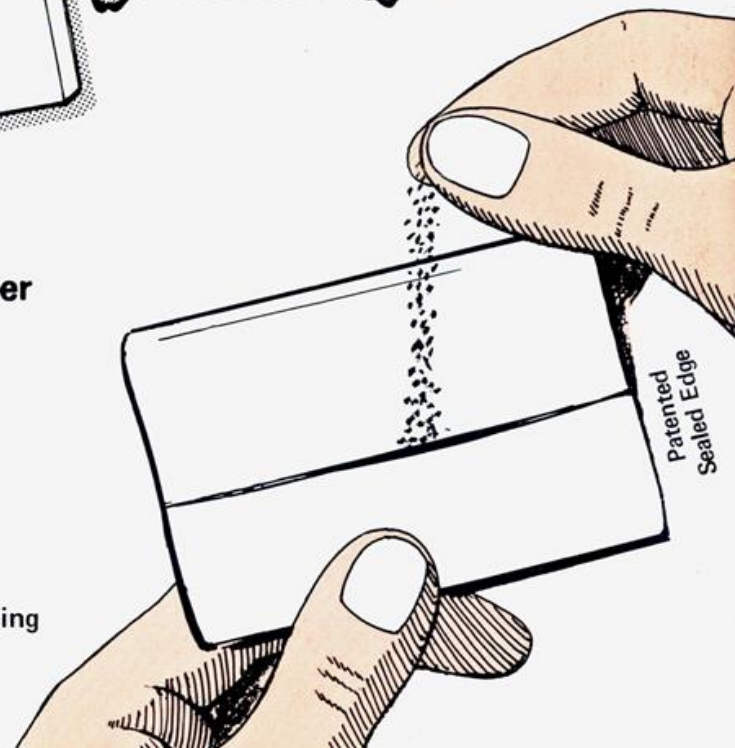
Kangaroo Brand introduces no hassle rolling...

Pouch Papers are designed to be the quickest and easiest papers ever used. You won't need a bulky rolling machine or anything to catch spills (there aren't any). Just fill, fold, roll and when you're ready to smoke squeeze the ends to pop them open.

ROLLING pouch

T.M.

Can You Afford To Use Any Other Paper



Innovation not Decoration!

See page 30 for Pouch Paper offer.

Patent Pending

Bi-Rite Enterprises, Inc., 3014 S. Archer, Chicago, Ill. 60608

High Times

AUGUST 1978



Reprinted from the High Times Archive

https://archive.hightimes.com/issue/19780801/print

©2023 - HIGH TIMES ARCHIVE. ALL RIGHTS RESERVED.